

Saving mortality with immorality

A study exploring the justification of immoral characters in movies and series

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ABSTRACT

Being aware of the unpredictable nature of life and the uncontrollable possibility for terror and death is difficult for humans to cope with. Terror Management Theory states that when people's mortality is salient, they respond more intensively towards people who violate or uphold cultural values (Greenberg et al., 1997). This theory has been studied in relation to media many times, it has for example been shown that meaningful content is more enjoyed under mortality salience and that characters who uphold cultural values are better liked under these circumstances (Rieger & Hofer, 2017). However, media often portray characters that behave morally wrong, but are not necessarily perceived as the bad guy. Studies showed that generally, viewers are able to continue liking the immoral character by morally disengaging (Krakowiak & Tsay-Vogel, 2013). But how would viewers perceive such morally ambiguous characters when their mortality is salient and their cultural values are ought to be protected?

This study used an 2x2 online survey experiment to analyze the extent to which mortality salience influences the justification of immoral characters. Participants were either shown a manipulating question, making mortality salient, or a control question. On top of that, participants' either watched a clip from Game of Thrones containing an immoral character, who performed a justified immoral act, or a clip from the same series containing an unjustified immoral act from an immoral character. Following, participants answered question in a survey measuring their justification of the immoral characters.

By the use of analysis of variance and hierarchical regressions, the study found that justified immoral behavior led to a higher justification of the immoral character. However, mortality salience was not shown to have an effect on the justification of immoral characters. Reason for this could be that moral disengagement restrains the effect from mortality salience in the justification of immoral characters (Krakowiak & Tsay-Vogel, 2013). Regression analyses found that the construction of justification of immoral characters does differ between mortality salience and control groups. Findings of this research also resonated with other studies in the fact that it was shown that justified behavior was better able to restore the anxiety buffer system activated by mortality salience than unjustified behavior.

KEYWORDS: eudaimonic entertainment, mortality salience, terror management theory, morally ambiguous characters

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1. Introduction

In almost every week of 2019, there was a person shot on American school property (Wolfe & Walker, 2019). Precisely did 45 school shootings happen in that year where at least one person was shot. However a true tragedy, these events do not make 2019 particularly notable since these situations have occurred in American society for a much longer time (Carrega, 2019). Dozens of school shootings have been happening in the United States for several decades, which makes it a nation-wide problem. A problem which will probably not cease anytime soon. The cruelty of these situations elicits strong emotions across citizens of the US (Burns & Crawford, 1999). It has been shown that public fear rises significantly after such events happen, disrupting everyday life of Americans. What follows are strong public opinions of American citizens towards the government, demanding stricter rules in order to restore safety within the country.

The public fear that arises after such events is logically explained by the fact that tragic events like these remind people of the vulnerability of life (Burns & Crawford, 1999). It emphasizes that nothing in life is certain and therefore nothing should be taken for granted. The awareness that there is always an uncontrollable possibility of terror and death is difficult for humans to cope with (Greenberg et al., 1997). Moreover are humans the only species alive that are knowledgeable enough to understand the unmanageable nature of life. These thoughts however are buffered in everyday life, in order for humans to continue living a life without constant worrying about terror (Greenberg et al., 1997).

However, when situations like school shootings occur, people become conscious of the vulnerability of themselves and their loved ones (Greenberg et al., 1997). This consciousness is difficult to endure and therefore is able to influence someone's behavior and judgements in the moment. When harm is done and people become aware of their mortality, they tend to feel a desire to defend their culture that made it seem like the world was a rightful place (Greenberg et al., 1997). Specifically, people in this state of mind tend to become more positive towards people who uphold cultural values. Likewise do people tend to be more rejective towards people who violate cultural norms when their mortality is salient (Greenberg et al., 1997), which is shown in the moral panic that arises after school shootings (Burns & Crawford, 1999).

Although situations of insurmountable danger are a fearful obstacle to human life, such situations contrariwise often are used within the storylines of entertainment media. Since entertaining media have generally been understood to seek an experience of enjoyment (Vorderer, Klimmt & Ritterfeld, 2004), it has long been questioned why it occurs that viewers enjoy watching situations they would avoid in real life. An often used explanation for this behavior is the fact that entertainment provide media users a safe place to consider uncontrollable danger and reflect on the

meaning of life (Oliver & Raney, 2011). Hence viewers can explore life's meaning by safely experiencing situations any would wish to not experience in its own life. Such a clarification make it insightful why people enjoy tearjerkers like Hotel Rwanda (George & Kitman Ho, 2004), or movies with a tragic ending, like the Titanic (Cameron & Landau, 1997). This group of meaningful entertainment, helping people with their exploration of life's meaning is often referred to as 'eudaimonic' entertainment.

Studies have shown that the enjoyment of entertaining media mostly elicits through the involved characters in the content (Raney, 2004). If a liked character experiences positive developments, one will evoke a feeling of enjoyment. The same happens in the case disliked characters evolve in a negative direction. Since viewers wish to be entertained by their consumption (Vorderer et al., 2004), they seek to appreciate their liked character throughout their entertainment experience (Raney, 2004). However in eudaimonic entertainment, often liked characters do not behave morally acceptable all the times. For example Dexter (Cerone, Phillips, Goldwyn & Cleton, 2006) in the eponymous series who is primarily characterized by killing many people. Though not acceptable, viewers still like this main character and wish for his best future.

The study of Krakowiak and Tsay-Vogel (2013) has explained this appreciation of morally ambiguous characters. It is described that under the condition that the act can be justified in its context, people are able to morally disengage from the act and be acceptive towards the character. A theory that explains why media users would watch eight seasons of a series with a serial killer as the main character. However, how would viewers perceive morally ambiguous character when they are consciously aware of their own death? As previously mentioned, mortality salience leads to the increased desired punishment of individuals' violating one's culture (Greenberg et al., 1997). Does the ability of moral disengagement then still apply when someone responds based on the need to defend one's one cultural values and beliefs, in order to buffer thoughts about mortality?

It has already been shown that mortality salience influences someone's perception of eudaimonic content. People for example elicit higher enjoyment from meaningful content and people are more positive towards characters that overcome challenging situations (Rieger & Hofer, 2017). It remains however unknown how viewers perceive and judge characters who are not pure and honest contributions to a culture providing justice. Do viewers still find the ability to judge an immoral action based on its context, when they are consciously aware that their own death could be around the corner at any time? Or do individuals still find the ability to judge an immoral character based on the fact that justice is sometimes served by immorality? In order to explore these questions about judgements of immoral characters when consciously acknowledging the uncontrollable possibility of terror and death, the following research question is proposed:

To what extent does mortality salience influence the justification of immoral characters?

This study will be a relevant addition to the scientific field because it fills a gap of knowledge about how mortality salience influences the perception of an immoral character. Previous research has mainly focused on how mortality salience influences the viewing experience (Greenberg, Pyszczynski, Johnson, Greenberg & Solomon, 1999; Hofer, 2013; Rieger, Reinecke, Frischlich & Bente, 2015; Rieger & Hofer, 2017), or how meaningful content can help to buffer anxieties that arise when someone is consciously knowledgeable about their death (Kneer & Rieger, 2016; Rieger et al., 2015; Rieger & Hofer, 2017). Also, research has already focused on how mortality salience can influence consumers' perceptions of moral characters (Rieger & Hofer, 2017), however it is unknown how they evaluate immoral characters. The evaluation of immoral characters is especially interesting because mortality salience is closely related to cultural norms, in the sense that it activates its importance to fight for a culture (Greenberg et al., 1997). Hence making it an interesting topic how someone under mortality salience evaluates a character that violated cultural rules.

This study is socially relevant because it helps to provide additional explanation to how morally ambiguous people are judged under different circumstances. There are real life situation in which people who perform immoral acts are still portrayed as heroes. Take as example the national appraisal of the military and its acts, while foreign militaries could be judged for the same actions. Insight in the effect of mortality salience on perceptions of immoral characters give further explanation for how the context of a story is influential for its reception. When framing stories in different ways can elicit different levels of empathy, this can give interesting implications differing parties, for example for countries where there is no right for freedom of speech within journalism. This is in line with the argument of Tsay-Vogel and Krakowiak (2016) who state that studying moral judgements remains important. This study will help to broaden the understanding of perceptions towards immoral people.

The research question will be answered by first elaborately exploring studies and theories regarding the topic of interest. Following, the method of the study will be argued and explained. Following will the results be discussed and lastly will the research question be answered and the implications of the study be named.

2. Theoretical framework

In the following chapter, literature regarding the central concepts and theories of this study will be elaborately presented. To start will the central theory of this study be discussed, namely Terror Management Theory. Next will theories regarding media use be elaborately explained. Following will one of the leading theories explaining motivations to use media, namely Mood Management Theory, will be explained (Reinecke, 2017). Continuing will the widely studied and accepted Disposition Theory be addressed, which explains the enjoyment of media content (Sanders, 2010). Then, the concept of hedonic and eudaimonic motivations to consume entertainment will be explained (Oliver & Raney, 2011). Next will studies regarding the central approach of Terror Management theory in relation to media be discussed (Greenberg et al., 1997). Following are theories regarding the enjoyment of eudaimonic media (Tamborini et al., 2010) and morally ambiguous movie characters (Krakowiak & Tsay-Vogel, 2013) be discussed. Lastly will hypotheses be formulated, which will be guiding during this study.

2.1 Terror Management Theory

The central theory within this study is Terror Management Theory (TMT), which explains how the unconscious human awareness of mortality can influence behavior (Greenberg et al., 1997). The theory is based on the notice that humans are the only species that have abstract thoughts, which enables humans to be aware of their existence. This awareness leads to the fact that humans are also knowledgeable about the possibility of uncontrollable terror and death.

Humans have to cope with the consciousness that there is always an uncontrollable risk for terror and death. According to TMT, humans are able to buffer this fear due to a so called ‘anxiety buffer system’, which consists of two components: culture and self-esteem (Greenberg et al., 1997). First of all, TMT argues that humans control their fears about possible terror, by creating culture. Living according to a culture creates the possibility to give life significant meaning and stability, and allows to undermine thoughts about the uncontrollable possibility of death. Culture is able to undermine these feelings because it creates the conception of a righteous world where good people will not experience the bad (Rosenblatt, Greenberg, Solomon, Pyszczynski & Lyon, 1989). On top of that does it create the conception of immortality, either through religion or through the contribution to a culture that exists beyond death. As quoted by Greenberg et al. (1997): “*Humans make the real unreal by making the unreal real*” (p.65).

The other element of TMT is self-esteem (Greenberg et al., 1997). Culture can give life significant meaning, but only when someone has the conscious belief that one belongs to that culture. According to the theory, self-esteem functions as the secure feeling that someone is living according to the values of one culture and that one belongs to that culture. Together do cultural worldview and self-esteem function as a system to buffer against thoughts of mortality (Greenberg et al., 1997). Culture gives people the conception of a just and meaningful world and self-esteem secures humans

with the belief that they belong to that culture. Culture and self-esteem have been recognized as basic human needs for a long time, but TMT is the first approach to explain this primary demand.

The basic need for culture and self-esteem helps to understand why humans can heavily defend their own cultural values and beliefs: because their anxiety-buffer system is ought to be remained (Burke, Martens & Faucher, 2010). In order to cope with the realization of possible terror and death, self-esteem is ought to be controlled (Greenberg et al., 1997). Self-esteem can only exist when faith in the culture remains. Accordingly, faith in a culture can only be sustained if others believe in it as well. Situations can occur where individuals break the rules that are set by a particular culture. In that case, people feel the need to punish these individuals (Rosenblatt et al., 1989). When such people are penalized for their wrongdoing, it benefits people to maintain their culture and coherent self-esteem, which continuously buffers the unconscious anxiety for terror and death.

What TMT continuously states is that when one's mortality is made salient, one will be even more responsive towards people who uphold or violate cultural values, because their anxiety-buffer has been disturbed (Greenberg et al., 1995; Rosenblatt et al., 1989). Specifically, one will be more positive towards people who live according to one's culture and react more negatively towards individuals violating one's culture. Burke et al. (2010) showed that within twenty years of mortality salience research, the awareness of one's mortality generally had moderate to large effects on behaviors and attitudes of participants. For example the study of Rosenblatt et al. (1989) studied an experiment involving judges in the case of a prostitute. The experiments showed that when individuals' mortality was made salient, they would punish a prostitute harder than if mortality was not salient. However, the study also showed that this was very reliant on an individuals' perception of prostitutes. People who had more negative feelings towards prostitutes would give even higher punishments towards the defendant. This shows that cultural worldviews can differ per person, and this can cause different levels of mortality salience effect. The study also showed that when mortality was salient, individuals were more supportive towards heroes who acted respectfully towards a certain culture. Within this study it will however be studied how mortality salience influences the justification of immoral characters, which is interesting in relation to TMT since cultural values are disrespected (Greenberg et al., 1995).

2.2 Mood Management Theory

In his 1988 work, Zillmann (1988) proposes Mood Management Theory, a theory which explains the decision making process of an individual wanting to consume any form of communication. Zillmann (1988) describes that someone's mood is the most important factor, guiding an individuals' decision making process. The theory entails that media users choose a certain media product based on their mood, where the ultimate goal is to either expand on a positive mood, or to attempt to press away negative moods. Zillmann (1988) describes that in practice this means

that media users consider their expected response to a certain media product and that they will most likely choose the product that would elicit the most enjoyment. Although individuals can be consciously aware of this in certain situations, often this decision making process happens at an unconscious state (Reinecke, 2017).

The theory is based on a hedonistic premise which entails that at any time, individuals will aim to minimize bad moods and seek to intensify positive moods (Zillmann, 1988). This premise imposes that individuals regulate these moods with internal and external stimuli, in order to create the most effectively positively influencing situation. Using a medium would be considered an external stimuli. The effect that a particular medium can have on an individual is dependent on that person's mood, meaning that media have different effects on different moods (Zillmann, 1988). Hence, someone's specific mood will guide the decision to pick a medium. At the same time, choosing a particular content can also be for small reasons, for example when someone just feels like watching something. Still, the end-goal remains to maximize pleasure.

The firstly proposed theory by Zillmann (1988) led to mixed empirical evidence, which is why it became recognized that sometimes, media consumption can go beyond hedonism (Zillmann, 2000). For this reason, the theory was extended throughout the years, where four additional notions became acknowledged (Reinecke, 2017).

The first addition addresses the fact that decision making processes can differ demographically, which is why for example gender should be taken into account when predicting someone's decision making process (Reinecke, 2017). Additionally does the theory now consider that although the end goal of media consumption is enjoyment, still negative feelings can be experienced during media consumption. Nonetheless, those feelings can develop to be perceived as positive feelings over time. Another addition is the recognition that some media is not consumed for the sake of maximization of positive feelings, but for the sake of information seeking (Reinecke, 2017). This applies for example to watching the news and studying. Lastly does the theory now take into consideration that individuals can consume media content that will not elicit enjoyment short term, but will eventually in the long term (Reinecke, 2017). Although the theory was expended throughout the years, one valid critique that remained is the fact that the model focusses on one specific response (Oliver & Raney, 2011; Vorderer et al., 2004). It was judged that Mood Management Theory was not applicable for all kinds of media that have been produced and widely enjoyed.

This theory is important to the study because it gives insight in the general motivations to consume entertaining content. This knowledge will be necessary to get to an understanding to why media users consume entertaining content including morally ambiguous characters.

2.3 Disposition Theory

Mood Management Theory is a general theory which explains motivations to consume media (Zillmann, 1988). It is argued within this theory that media users are motivated to use media to satisfy the need of being entertained. Although multiple emotions can arise during media consumption, enjoyment is constantly recognized as the end-goal. Additionally, Disposition Theory explains how media users derive at this target.

Disposition Theory is one of the most generally used theories to explain media enjoyment (Raney, 2004). As described within this theory, enjoyment of media consumption is highly dependent on one's perception of the involved characters and their development within the narrative. Media users' opinions about characters can vary between very positive and very negative. Primarily, users experience enjoyment when their positively valued characters experience good outcomes and negatively valued characters experience bad situations (Krakowiak & Tsay-Vogel, 2016; Raney, 2004; Tamborini, 2011; Vorderer et al., 2004).

Since this theory entails that media enjoyment is most generally dependent on character impressions, the theory is highly explanatory for character perception itself as well (Raney, 2004). Raney (2004) describes that according to previous research, the first step in the formation of character impression is developed in previous character experiences. Previous media experiences shape so called 'schemas' in the media user's brain, which helps them to recognize certain characters and story lines in media content (Sanders, 2010). More easily said, an individual's perception of a character is influenced by opinions about characters of previously watched entertainment. Schemas help media users to easily identify the good and bad characters within entertaining content (Raney, 2004). These impressions determinate users' hope for the content, since liked characters are wished to experience the good and disliked characters are preferred the bad. Enjoyment increases when these situations occur, additionally enjoyment decreases when the contrary results.

Continuing, the set perceptions of characters become leading in the entertainment experience and guide viewers in their judgement on further actions (Raney, 2004). Raney (2004) suggests that judgement of a characters' actions are primarily guided by our opinion about the character, rather than that every action is individually judged. Since the main goal of consumption is enjoyment, it is desired to continue liking characters because those provide the desired entertainment (Raney, 2004; Zillmann, 1988). For this reason, media consumers automatically have more empathy towards positively valued characters in comparison to negatively valued characters.

Raney (2004) followingly describes how viewers are able to accept behaviour from good characters, that would generally be valued as immoral and unacceptable. It is explained that people in general are able to either to activate a system of sanctioning, or a system of disengagement regarding

immoral actions. When certain behaviour can be reformulated and explained, individuals are able to disengage from the act itself and accept the behaviour. This can be done by for example the minimization of harm (everyone does it) or the displacement of responsibilities (he was told to do so under pressure): they morally disengage. By morally disengaging from the act, viewers' enable themselves to continue experiencing enjoyment because they can morally accept the actions of their liked characters.

This theory is important to the study because it gives a deeper understanding to Mood Management Theory (Zillmann, 1988), because this theory explains the fulfillment of the most basic motivation to media consumption, namely enjoyment. The theory followingly also gives an explanation on how morality is involved in the enjoyment of characters, since the gratification is dependent on the progress of good and bad characters. This information gives implications for expectations for the research and helps to build the general understanding of the enjoyment of watching immoral characters.

2.4 Hedonic and Eudaimonic motivations

Both Mood Management Theory (Zillmann, 1988), as well as Disposition Theory (Raney, 2004) are based on the conception that media is exclusively consumed to fulfil a need for enjoyment. Oliver and Raney (2011) describe that this hedonistic motivator has been the general conception of entertainment consumption within media psychology for a long time. Although both researchers recognize that there is much empirical support for this conception, they do criticize it because of its lack of comprehensiveness. Oliver and Raney (2011) argue that the hedonistic premise holds true for many media content, but not all of it. The researchers take the example of tragic and heart-breaking drama's and justly make the comment that those genres can be gratifying, but stating that those are enjoyed, is odd. For this reason, Oliver and Raney (2011) formulate and test an additional motivator for media consumption, which helps to explain motivations that were previously unaccounted for.

In their study, Oliver and Raney (2011) present a second driver for consumers to use media, namely the eudaimonic motivator. This kind of motivation is described to fulfil a need for truth-seeking and considerations of the meaning of life. This motivation describes consumers' desire to engage in 'meaningful' entertainment. By empirical testing, the researchers show that the eudaimonic motivator is an addition to the generally understood hedonic motivator, meaning that they both are unique drivers for media consumers. A study of Tamborini et al. (2011), analysing needs that are satisfied during video gaming also supports the statement of Oliver and Raney (2011) since the results show that both hedonic and eudaimonic needs were separately satisfied.

The by Oliver and Raney (2011) formulated eudaimonic motivator provides a comprehensive addition to the understanding of media motivation. The combination of hedonic and

eudaimonic considerations are used within multiple disciplines, such as in psychology when describing well-being or happiness (Oliver & Raney, 2011). Within psychology, hedonic well-being describes the experience of much positive affect and less negative affect, while eudaimonic well-being explains meaning in life and feelings of self-development.

Several studies have shown that this newly formulated eudaimonic motivators engages in an individual's need to think about the meaning of life and to develop oneself (Rieger et al., 2014). First of all the study of Oliver, Hartmann and Woolley (2012), which showed that by engaging in meaningful media, consumers' often experienced elevated feelings of moral virtue, while hedonic entertainment failed to elicit feelings of meaningful affect. On top of that did the study of Wirth, Hofer and Schramm (2012) show that meaningful entertainment succeeded in fulfilling an individuals' needs for autonomy and perception of meaning in life.

As described by Oliver and Raney (2011), the feelings that individuals' experience while consuming meaningful media can help with the general exploration of life. More specifically, those feelings can help media users for example with resolving distressing situations in real life or gaining the ability to show more empathy to others. On top of that, the theory of eudaimonic motivations is complementing to studies from the past which showed that watching particular movies could be associated with an individuals' self-development and ability to deal with challenges (Rieger et al., 2014).

The theory of eudaimonic motivations is important to the study since it provides an understanding to why media users consume entertaining content including situations one would not want to experience in their own life. Such an understanding is particularly important to this study, considering the interest in morally ambiguous characters.

2.5 TMT in relation to the media

The central approach of TMT will now be discussed in relation to the media. As previously discussed, TMT is a theory explaining how humans cope with the uncontrollable prospect of death and the uncontrollability of terror. The approach states that humans 'buffer' this realization by culture and self-esteem. These components push the awareness of terror and death to an unconscious state. However, when someone's mortality is made salient, this buffer system gets disrupted and the uncontrollable prospect ceases to be buffered. The theory states that people in this state of mind become more reactive towards people who uphold or violate cultural rules. The theory has been studied several times in relation to the media.

Several studies have shown the effects mortality salience can have on further media evaluations. To start did multiple studies show that people who were consciously aware of their death were more positively appreciative towards meaningful content, in comparison to people whose mortality was not consciously acknowledged (Goldenberg et al., 1999; Hofer, 2013; Rieger et al.,

2015; Rieger & Hofer, 2017). On top of that, the study Rieger and Hofer (2017) presented that people who saw a leading character surviving a life-threatening illness, would be more positively appreciative towards this character than participants who were not reminded of their own death. This result indicates that mortality salience can have an influence on evaluations of characters.

Additionally did both studies of Rieger and Hofer (2017) and Goldenberg et al. (1999) show that when mortality was salient, people were less entertained by non-meaningful content than control groups and they would also elicit higher enjoyment from meaningful content than control groups.

Additionally do studies show how meaningful content can help to activate the anxiety-buffer system that is formulated in TMT (Greenberg et al., 1997). The study of Rieger and Hofer (2017) firstly demonstrated that when participants would watch a movie where an ill character survives a life threatening illness, people do not feel the need to activate their anxiety buffer system after the consumption of this movie. Secondly, Rieger et al. (2015) showed that the anxiety buffer system does not have to be activated at all after watching meaningful entertainment when mortality is salient, which indicates that meaningful content can function as an anxiety buffer. Kneer and Rieger (2016) showed that when one's anxiety-buffer mechanism is activated, the other mechanism is restored as well. This was demonstrated by the fact that when heavy metal fans would listen to heavy metal music, it would activate their cultural worldview mechanism when mortality was salient. After listening to the music, it was shown that the self-esteem buffer did not demand activation anymore.

This theory is important to this study because it explains foundation of the effect which mortality salience can have on behaviors and judgements. The effect of mortality salience is central within this study and therefore it is important to consider how this influence is constructed.

2.6 Enjoyment of eudaimonic media and morally ambiguous characters

The enjoyment of entertainment has been explained in different theories. First of all, Vorderer et al. (2004) state that enjoyment is the most important motivator for people to consume entertaining content, and it would also be the biggest decision driver when considering what entertainment to consume. This theory is based on a general rule in psychology that most acts are done for the sake of pleasure. The researchers describe that enjoyment is the eventual end stadium, while a wide variety of dynamic and complex emotions can be experienced along the way.

Although Vorderer et al. (2004) acknowledge that negative emotions can be felt during an eventually enjoying experience, Oliver and Raney (2011) point out that this description cannot comprehensively explain the enjoyment of content showing morally questionable situations. An approach that can better explain the enjoyment of such content is the theory of 'escapism' (Oliver & Raney, 2011; Raney, 2004). Escapisms states that media can be enjoyed by the means of escaping from reality, since entertainment provide a safe place to consider meaningful questions about life. Escapism can be understood in multiple situations, such as considering situations of uncontrollable

danger in a safe setting (Oliver & Raney, 2011) or escaping from hectic lives by engaging in fictive worlds (Raney, 2004).

Following, Tamborini et al. (2010) provide a comprehensive formulation of media enjoyment. In their article, the researchers explain that enjoyment arises when intrinsic needs are satisfied. Generally, researchers such as Vorderer et al. (2004) perceived these needs as primarily hedonic, such as arousal and affect. Tamborini et al. (2010) state that this approach is incomplete because the satisfaction of non-hedonic needs, such as competence and autonomy, are equally important when seeking enjoyment. In 2011, Tamborini et al. (2011) tested this assumption and showed that both hedonic, as well as non-hedonic need accounted for unique variance in enjoyment.

The enjoyment of eudaimonic media should also be explained largely by its involved characters, since Disposition Theory of Raney (2004) explains that enjoyment of media consumption is highly dependent on the development of liked characters within the narrative. Within the field of media psychology there exists a general interest in viewers perception of media characters and the perceived relationships that are experienced by media consumers (Vorderer et al., 2004). Horton and Wohl (1956) describe the concept of para-social relationship: the perceived realistic relationship one has with a media persona. According to Hofer and Wohl (1956) are these perceived relationships established because media present detailed stories of characters, where viewers get the perception that they honestly know their liked character.

However, media entertainment often include morally ambiguous characters, which are more difficult to evaluate because they do not fit within the typical ‘good guy’ or ‘bad guy’ stereotype. Evaluating such characters involve both rational, as well as intuitive moral reasoning (Tamborini, 2011). Immoral behavior of a liked character can eventually be accepted by the means of moral disengagement. Krakowiak and Tsay-Vogel (2013) showed that moral disengagement eventually led viewers to describe the immoral character in more positive ways and less negative ways. The researchers additionally agreed on the fact that assigned positive attributes can predict the extent to which a viewer likes a media character, showing that moral disengagement can lead to the continued liking of a character (Krakowiak & Tsay-Vogel, 2013).

There are a number of ways in which the perception of a morally ambiguous character is influenced, which in turn predicts whether moral disengagement is activated and thus character liking is continued. The first influence is the desire to like an appreciated character. The notion of wanting to like a particular character is widely understood within the media field. Raney (2004) explains this idea by describing that media users want to be entertained by the media they consume, which is why viewers often take steps that will secure their feeling of enjoyment. Krakowiak and Tsay-Vogel (2013) continuously describe that viewers excuse immoral behavior of good characters by morally disengaging for the same reason: because viewers have liked these characters and have wished for a positive evolution of the character’s story.

A second influencing factor for the perception of a morally ambiguous character are the intentions behind the immoral act. Krakowiak and Tsay-Vogel (2013) show that the reasoning behind an immoral act is decisive for their appreciation of the character, where justified acts assign positive valuations towards the character and unjustified acts assign negative valuations towards the character. On top of that are characters more positively appreciated when their act was made from altruistic motivations, in comparison to selfish motivations. The researchers additionally show that adults perception of an immoral act are generally guided by motivational cues instead of the consequences (Krakowiak & Tsay-Vogel, 2013).

The outcome of the immoral act is additionally important to character perception. Specifically when the immoral act had a positive outcome, viewers are more likely to perceive the character less negatively, which fosters moral disengagement and character liking (Krakowiak & Tsay-Vogel, 2013). The study of Krakowiak and Tsay-Vogel (2013) especially demonstrated that a positive outcome led viewers to assign less negative traits towards a character, while no difference in assigning positive traits was found. However, the researchers also agreed on the fact that only positive traits were predictive for character liking.

Lastly does the viewers ability to identify with the media character influence its perception of the character. Identification with a character happens when the viewer puts him/herself into the character's shoes and experiences the situation from their point of view (Cohen, 2001). Cohen (2001) describes that identification occurs more successfully when one's own perspective is similar to the characters' perspective. In their study, Tsay-Vogel and Krakowiak (2011) showed that when viewers thought that media personas had characteristics like themselves, they would identify with the character and morally disengage from the immoral act and justify the behavior. The same was shown by Hartmann and Goldhoorn (2011) who showed that people were more likely to develop a parasocial relationship with a TV character when they could relate to the persona, which would eventually lead to higher character liking.

These theories are important to the study because perceptions of immoral characters in eudaimonic media are researched, thus the formations of such evaluations should be understood. On top of that do the theories provide a comprehensive understanding of how enjoyment is experienced while watching a storyline, one would not wish to experience in their own life, including characters who are not fully guided by their moral compass.

2.7 Hypotheses

The aforementioned theories and findings have described differing aspects about the experience of immoral content. This elaboration has shown that multiple notions are important when considering viewers' perception of immoral characters, such as the justification of the immoral acts (Krakowiak & Tsay-Vogel, 2013), viewers character liking (Raney, 2004), enjoyment of the content (Oliver & Raney, 2011), appreciation (Oliver & Raney, 2011) and search for meaning in life

(Greenberg et al., 1997). Based on the previously mentioned researches, there can be several hypotheses made. The first set of hypotheses, H1 till H3, will hypothesize expected differences between MS group. The remaining set of hypotheses will set certain expectations on how the justification of immoral characters is constructed.

Regarding the justification of immoral actions do studies show that when mortality is not consciously acknowledged, viewers usually hold positive judgement towards justified immoral acts and negative judgements towards unjustified immoral acts (Krakowiak & Tsay-Vogel, 2013). Continuously, studies have found that mortality salience leads to increased responsiveness towards people who uphold or violate cultural rules (Greenberg et al, 1995; Rosenblatt et al., 1989). As an example, the study of Rosenblatt et al. (1989) showed that juries would praise heroes more under mortality salience and they would punish moral violators harder under this condition as well. Expectations can be made considering the fact that under neutral circumstances, viewers are able to accept immoral acts when the actions were justified in its context (Krakowiak & Tsay-Vogel, 2013), and by the fact that judgements of a character's actions are primarily guided by viewers' opinion of the character, rather than every act individually (Raney, 2004). For these reasons it is expected that mortality salience will intensify the judgements of immoral actions in the same direction as they would usually be experienced, which leads to the following hypotheses:

H1: Justification of violence leads to increased acceptance of violence.

H2: Mortality salience leads to increased acceptance of violence of the justified immoral act.

H3: Mortality salience leads to the decreased acceptance of violence of the unjustified immoral act.

H4: Mortality salience leads to an increased influence from justification of violence on acceptance of violence.

Generally is character liking predicted by previous media experiences which help viewers to quickly recognize the 'good' and 'bad' characters within an entertainment product (Raney, 2004). These instantly formed perception become guiding in the entertainment experience since viewers' have the need to like the good characters and wish for their well doing because those characters' provide the viewer's needed entertainment (Raney, 2004; Zillmann, 1988). In order to secure this, viewers automatically feel more empathy towards good characters in comparison to bad characters, which leads to the viewers' ability to accept immoral behavior of a positively valued character (Raney, 2004). Regarding the fact that the study of Rieger and Hofer (2017) has found that mortality salience can influence evaluations of a character and generally reactions towards meaningful content intensify when mortality is salient (Burke et al., 2010; Greenberg et al., 1995; Rosenblatt et al., 1989), the following hypotheses are made:

H5: Justification of violence leads to increased character liking.

H6: Mortality salience leads to increased character liking of the justified character.

H7: Mortality salience leads to decreased character liking of the unjustified character.

H8: Mortality salience leads to an increased influence from justification of violence on character liking.

Considering a character's positive and negative attributes is interesting when studying characters that are not easily put within the good guy or bad guy box, based on their actions. The study of Krakowiak and Tsay-Vogel (2013) showed that viewers' could morally disengage when their liked character behaved immoral. This disengagement eventually led to perceiving the character more positively and less negatively. The study of Krakowiak and Tsay-Vogel (2013) specifically showed that when the act is justifiable, characters would be perceived more positively and unjustifiable acts would make the character to be perceived more negatively. On top of that do viewers perceive a character more positively when the immoral act was done for altruistic reasons in comparison to selfish reasons. Lastly are the characters perceived less negatively if the outcome of the act was positive. These findings, together with the fact that mortality salience was found to intensify the evaluations of characters (Rieger & Hofer, 2017) and intensify evaluations of meaningful content in general (Burke et al., 2010; Greenberg et al., 1995; Rosenblatt et al., 1989) have led to the following hypotheses:

H9: Justification of violence leads to increased assignment of positive attributes.

H10: Mortality salience leads to increased assignment of positive attributes to the justified character.

H11: Mortality salience leads to decreased assignment of positive attributes to the unjustified character.

H12: Mortality salience leads to an increased influence from justification of violence on the assignment of positive attributes.

H13: Justification of violence leads to decreased assignment of negative attributes.

H14: Mortality salience leads to decreased assignment of negative attributes to the justified character.

H15: Mortality salience leads to the increased assignment of negative attributes to the unjustified immoral character.

H16: Mortality salience leads to an increased influence from justification of violence on the assignment of negative attributes.

It has generally been understood that media are consumed because of a need for enjoyment (Zillmann, 1988). Also the consumption of meaningful content, showing for example life threatening situations, are enjoyed by viewers because they help to satisfy non-hedonic needs (Tamborini et al.,

2010), for example because it creates a possibility for individuals to escape from reality and consider important life questions in a safe place (Oliver & Raney, 2011; Raney, 2004).

Many studies have found that the extent of enjoyment can be predicted by the development of good and bad characters within the story, where most enjoyment is elicited when good characters experience positive outcomes and bad characters encounter negative outcomes (Krakowiak & Tsay-Vogel, 2016; Raney, 2004; Tamborini, 2011; Vorderer et al., 2004). Additionally did the studies of Rieger and Hofer (2017) and Goldenberg et al. (1999) show that mortality salience led to increased experiences of enjoyment when mortality is salient. For these reasons, the following hypotheses are made:

H17: Justification of violence leads to increased enjoyment.

H18: Mortality salience leads to increased enjoyment of the justified scene.

H19: Mortality salience leads to decreased enjoyment of the unjustified scene.

H20: Mortality salience leads to an increased influence from justification of violence on enjoyment.

Considering the fact that multiple studies have found that people under mortality salience are appreciating meaningful content more positively in comparison to people who are not consciously aware of their death (Goldenberg et al., 1999; Hofer, 2013; Rieger et al., 2015; Rieger & Hofer, 2017), the following hypotheses are made:

H21: Justification of violence leads to increased appreciation in the moment.

H22: Mortality salience leads to increased appreciation in the moment.

H23: Mortality salience leads to an increased influence from justification of violence on appreciation in the moment.

H24: Justification of violence leads to increased appreciation in the future.

H25: Mortality salience leads to increased appreciation in the future.

H26: Mortality salience leads to an increased influence from justification of violence on appreciation in the future.

Studies have found the extent to which media can help to restore the anxiety buffer system after mortality has become salient. The study of Rieger et al. (2015) firstly showed that the anxiety buffer system was restored after consuming meaningful entertainment. However, the study of Rieger and Hofer (2017) showed that especially a positive outcome of meaningful content would help to restore the anxiety buffer system. For that reason, it is expected that MS participants experience no differences in search for meaning in life in the case of justified immoral behavior. This expectation

originates from the fact that control participants' mortality was never salient and thus search for meaning in life should be stable (Greenberg et al., 1997), while the MS participants' activated buffer system was restored. At the same time, MS participants who watched the unjustified scene should not be able to restore their anxiety buffer system (Rieger & Hofer, 2017), which is why they are expected to differ from control participants. The following hypotheses are formulated:

H27: Justification of violence leads to decreased search for meaning in life.

H28: Mortality salience leads to similar search for meaning in life in case of justified behavior.

H29: Mortality salience leads to increased search for meaning in life in case of unjustified behavior.

H30: Justification of violence leads to increased established meaning in life.

H31: Mortality salience leads to similar established meaning in life in the case of justified behavior.

H32: Mortality salience leads to decreased established meaning in life in the case of unjustified behavior.

The next set of hypotheses will set expectations on how the justification of immoral characters is constructed. First of all is the acceptance of violence tried to be predicted. The study of Krakowiak and Tsay-Vogel (2013) showed that reasoning behind an immoral action is important for how it is perceived, therefore it is expected that the extent to which violence is justifiable will positively influence acceptance of violence. On top of that do viewers feel a need to continue to like their preferred characters, in order to continue experiencing enjoyment (Raney, 2004). Therefore, viewers often show more empathy towards character which they like. For those reasons, the following hypotheses are proposed:

H33: Justification of violence has a positive impact on acceptance of violence for MS groups.

H34a: Character liking has a positive impact on acceptance of violence for MS groups.

H34b: Positive attributes have a positive impact on acceptance of violence for MS groups.

H34c: Negative attributes have a negative impact on acceptance of violence for MS groups.

H35: Justification of violence has a positive impact on acceptance of violence for control groups.

H36a: Character liking has a positive impact on acceptance of violence for control groups.

H36b: Positive attributes have a positive impact on acceptance of violence for control groups.

H36c: Negative attributes have a negative impact on acceptance of violence for control groups.

Similarly, enjoyment can be explained by the developments involved characters undertake. Since generally, media users want to enjoy media content and continue liking their preferred characters (Raney, 2004), viewers often wish for their good characters to experience the positive, while they wish the negative to happen for the disliked characters (Krakowiak & Tsay-Vogel, 2016; Raney, 2004; Tamborini, 2011; Vorderer et al., 2004). Therefore the following hypotheses are proposed:

H37: Justification of violence has a positive impact on enjoyment for MS groups.

H38a: Character liking has a positive impact on enjoyment for MS groups.

H38b: Positive attributes have a positive impact on enjoyment for MS groups.

H38c: Negative attributes have a negative impact on enjoyment for MS groups.

H39: Justification of violence has a positive impact on enjoyment for control groups.

H40a: Character liking has a positive impact on enjoyment for control groups.

H40b: Positive attributes have a positive impact on enjoyment for control groups.

H40c: Negative attributes have a negative impact on enjoyment for control groups.

Appreciation followingly is linked to enjoyment (Oliver & Raney, 2011), therefore the same variables are thought to predict appreciation. However, enjoyment is also thought to influence appreciation since enjoyment is at the core of media experiences (Vorderer et al., 2004). The following hypotheses are therefore proposed:

H41: Justification of violence has a positive impact on appreciation now for MS groups.

H42a: Character liking has a positive influence on appreciation now for MS groups.

H42b: Positive attributes have a positive influence on appreciation now for MS groups.

H42c: Negative attributes have a negative influence on appreciation now for MS groups.

H43: Enjoyment has a positive influence on appreciation now for MS groups.

H44: Justification of violence has a positive impact on appreciation now for control groups.

H45a: Character liking has a positive influence on appreciation now for control groups.

H45b: Positive attributes have a positive influence on appreciation now for control groups.

H45c: Negative attributes have a negative influence on appreciation now for control groups.

H46: Enjoyment has a positive influence on appreciation now for control groups

H47: Justification of violence has a positive impact on appreciation later for MS groups.

H48a: Character liking has a positive influence on appreciation later for MS groups.

H48b: Positive attributes have a positive influence on appreciation later for MS groups.

H48c: Negative attributes have a negative influence on appreciation later for MS groups.

H49: Enjoyment has a positive influence on appreciation later for MS groups

H50: Justification of violence has a positive impact on appreciation later for control groups.

H51a: Character liking has a positive influence on appreciation later for control groups.

H51b: Positive attributes have a positive influence on appreciation later for control groups.

H51c: Negative attributes have a negative influence on appreciation later for control groups.

H52: Enjoyment has a positive influence on appreciation later for control groups

Following, search for meaning in life and established meaning in life are the last variables to be predicted. Since it has been found that certain meaningful content can help the anxiety-buffer to be restored (Kneer & Rieger, 2016; Rieger & Hofer, 2017; Rieger et al., 2015), it is expected that all variables measuring the viewing experience are able to predict search for and established meaning in life. Because it is expected that meaningful content will activate the anxiety buffer system and decrease the search for meaning in life (Kneer & Rieger, 2016; Rieger & Hofer, 2017; Rieger et al., 2015), it is expected that all variables have a negative impact on search for and established meaning in life. The variable negative attributes is the only exception, since anxiety buffer system is only activated when liked character experience the good (Rieger & Hofer, 2017), it is expected that the assignment of more negative attributes to a character leads to lower activation of the buffer system and thus higher search for meaning in life. This leads to the following hypotheses:

H53: Justification of violence has a negative impact on search for meaning in life for MS groups.

H54a: Character liking has a negative influence on search for meaning in life for MS groups.

H54b: Positive attributes have a negative influence on search for meaning in life for MS groups.

H54c: Negative attributes have a positive influence on search for meaning in life for MS groups.

H55: Enjoyment has a negative influence on search for meaning in life for MS groups.

H56a: Appreciation now has a negative influence on search for meaning in life for MS groups.

H56b: Appreciation later has a negative influence on search for meaning in life for MS groups.

H57: Justification of violence has a negative impact on search for meaning in life for control groups.

H58a: Character liking has a negative influence on search for meaning in life for control groups.

H58b: Positive attributes have a negative influence on search for meaning in life for control groups.

H58c: Negative attributes have a positive influence on search for meaning in life for control groups.

H59: Enjoyment has a negative influence on search for meaning in life for control groups.

H60a: Appreciation now has a negative influence on search for meaning in life for control groups.

H60b: Appreciation later has a negative influence on search for meaning in life for control groups.

H61: Justification of violence has a negative impact on established meaning in life for MS groups.

H62a: Character liking has a negative influence on established meaning in life for MS groups.

H62b: Positive attributes have a negative influence on established meaning in life for MS groups.

H62c: Negative attributes have a positive influence on established meaning in life for MS groups.

H63: Enjoyment has a negative influence on established meaning in life for MS groups.

H64a: Appreciation now has a negative influence on established meaning in life for MS groups.

H64b: Appreciation later has a negative influence on established meaning in life for MS groups.

H65: Justification of violence has a negative impact on established meaning in life for control groups.

H66a: Character liking has a negative influence on established meaning in life for control groups.

H66b: Positive attributes have a negative influence on established meaning in life for control groups.

H66c: Negative attributes have a positive influence on established meaning in life for control groups.

H67: Enjoyment has a negative influence on established meaning in life for control groups.

H68a: Appreciation now has a negative influence on established meaning in life for control groups.

H68b: Appreciation later has a negative influence on established meaning in life for control groups.

3. Method

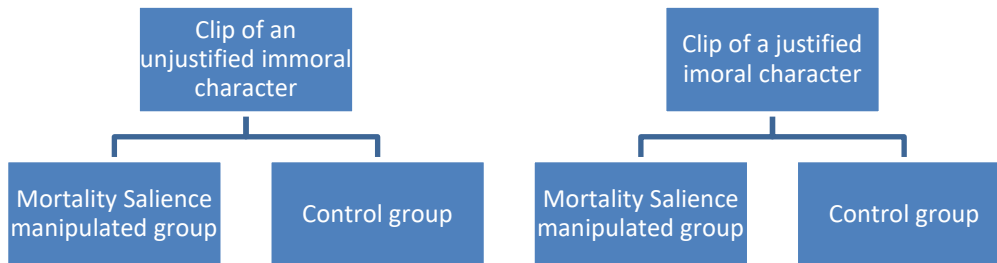
Within this chapter, the used method within this study will be described, as well as motivated. Continuously will the sampling method and sample be described. Following will the design of the survey be elaborately discussed and the reliability and validity will be argued. Lastly is the analysis process described.

3.1 Choice of method

The research question of this study will be answered by the use of quantitative methods. Quantitative methods are often used within social science research to make statements about a population on the basis of information from a sample (Kelley, Clark, Brown & Sitzia, 2003). Such statements are often centered around the perceptions and behaviors of a population in a certain situation (Fowler, 2012; Matthews & Ross, 2010). Both of these elements are important in this study, since it was aimed to conclude implications on the basis of generalizable results about the effect of mortality salience on the populations' perception of immoral characters. For this reason, a quantitative method was chosen.

Specifically, this study used an online survey experiment to answer the research question. Using an experiment is essential when wanting to explain a causal relationship between variables (Bellman, 2017). Such causal relationships are useful when theory about a certain topic is ought to be expended, which is something that is desired within this study.

The online survey experiment was executed on the basis of between-groups design (Bellman, 2017). A between-group design consist of one group who is getting a treatment and one control group, who is not getting a treatment. Continuing, both groups engage in a certain task. The results from this activity will be compared between both groups, in order to identify the effect that the manipulation had. Since this study aims to study the effect of mortality salience on audience perceptions of both a justified and an unjustified immoral character, there were two between-group designs executed within this study. The carried out design of this research is visualized in graphic 3.1. Analyzing the differences between the perceptions of immoral characters, when mortality is made salient and when it's not, will eventually help to answer the research question.

Graphic 3.1.*Visualization of group design*

The survey was distributed via Qualtrics. In practice were the respondent randomly assigned to a group when accessing the survey online. In addition did the program ensure that the groups were distributed equally. Bellman (2017) describes that randomization is very important since it helps to reduce the size of random error, which was desired for the necessary statistical tests. Since the respondent was not aware that he/she was assigned to a particular group, the survey was essentially experienced as any regular online survey.

The use of online surveys is continuously becoming more common (Bellman, 2017). There are a number of advantages of using this method. First of all does conducting a survey online have the benefit that it creates the possibility to reach people from all over the world. Kelley et al. (2003) write that the generalizability of online survey research is greater because the online distribution enables the possibility to reach people around the world, which could create a more representative sample. Another side to that advantage is that it was easier for the researcher to get in touch with the population (Evans & Mathur, 2005; Regmi, 2016; Wright, 2005). Not only are certain populations easier to reach via the internet, spreading the survey to those individuals also becomes quicker. In addition are participants more anonymous online than in real life. This decreases the possibility that respondents fill in socially desired answers (Matthews & Ross, 2010) and that the participant will be influenced by the unconscious behavior of the researcher, which could guide the participant in a certain direction (Kirk, 2012). The last important advantage is that online surveys are convenient for respondents since they can answer the survey at their own preferred moment and take as much time for it as they need (Evans & Mathur, 2005).

Nonetheless does this method also bring some disadvantages, like the fact that the researcher could not control the setting in which participants take the experiment (Bellman, 2017). A way to control this possible influence was to set the rule that the experiment has to be finished without any breaks. In this way, the chances were lower that participants get influenced by their surroundings during the experiment. Another downside to using surveys is that the collected data lacks in depth

information (Kelley et al., 2003). However, this is something that was not specifically desired within this study since an effect size is studied. In order to make final conclusions about a possible effect, generalizable data is necessary. A third downside is that respondents were dependent on the instructions that are given in the survey, since there is no possibility to ask questions (Evans & Mathur, 2005). However, quantitative data should be collected in standardized form (Kelley et al., 2003), which is why interaction with the interviewer is not desired in this case. Evans and Mathur (2005) then mention that when interaction is not desired, online surveys do provide a useful method. The survey was tested beforehand by four people to make sure that the questions are clear at all times, which is advised in both articles of Evans and Mathur (2005) and Kelley et al. (2003).

3.2 Sampling

The population that was studied within this research are English speaking Europeans, between the age of 20-30 who feel themselves belonging to Western culture. Terror Management Theory responds according to someone's cultural worldview (Greenberg et al., 1997). When someone lives according to different cultural norms, then Terror Management Theory will have different behavioral implications. For that reason it is necessary that all respondents live according to similar moral values. The age category was chosen because young people use media relatively a lot (Küng, 2017). Choosing an age group was important because particular media can be differently perceived by different age groups (Küng, 2017) and thoughts about mortality might have different implications for different age groups (Greenberg et al., 1997). Using an online survey was specifically useful for this population, since this generation is very skilled and known on the internet (Regmi, 2016).

In this study, non-random sampling was used since there is no specific data of the entire population (Kelley et al., 2003). The sampling method included characteristics from purposive, convenience and snow-ball sampling. First of all was the survey distributed amongst friends and relatives of the researcher, who are part of the studied population. These respondents were asked to distribute the survey across the people they know within the population, which is a combination of purposive and snowball-sampling. On top of that was convenience sampling also applied, since the survey was distributed via SurveySwap (www.surveyswap.com). SurveySwap provides the possibility to obtain questionnaire participants, by filling in questionnaires of other researchers. The platform is reliable because it detects respondents who finished the questionnaire too fast, and sends a message to the researcher so they can delete the particular participant. Therefore it is ensured that all obtained participants have taken the time needed to fill in the survey. A second reason why this platform is reliable is because it uses a swapping method. Other survey websites pay respondents to participate in a study, which brings the threat that people use a VPN source to make them appear from another country, in order to get paid more for their participation. Such things cannot happen

on SurveySwap, since respondents are not paid for their participation, but get respondents to their questionnaire as a trade.

Kelley et al. (2003) describe that the sample size is dependent on the purpose of the research, the statistical quality that is desired and the available opportunities. In the basis is a bigger sample size always desirable. It was aimed to obtain at least 150 participants within this research (Janssen & Verboord, 2018).

Sample

When all data was obtained, the dataset was adjusted to only include complete surveys and to exclude participants of non-Western countries and participants who were over the age of 30 or under the age of 20. After those adjustments, the dataset included 192 participants. 65% of the respondents was female and 35% was male. The age range as previously mentioned between 20 and 30, the mean age was 23 (SD= 2.35). The participants came from 22 different Western countries. Most participants came from the Netherlands (58.5%) or Germany (13,5%). Most participants' highest level of education was a Bachelor's degree (51,6%), a Master's degree (19.3%) or a high school diploma or the equivalent (12.5%).

The sample was divided in four groups, as previously visualized in graph 3.1. The first group was exposed to the MS manipulating question and observed the justified immoral scene. This groups consisted of 48 people of which 31% was male and 69% was female. The group participants' ages ranged from 19 to 29, mean age being 23 (SD = 2.14). The second group also observed the justified immoral scene, however they were asked the control question at the beginning of the survey. This group consisted of 48 people, with an age range from 18 to 30, the mean age being 23 (SD= 2.56). Within this group, 58% was female and 42% was male. The following group undertook the MS manipulating question and observed the unjustified immoral scene. This group consisted of 50 people, of which 64% was female and 36% was male. The ages ranged from 19 to 30, 24 being the mean age (SD= 2.72). The last group watched the unjustified immoral scene as well, however they did not answer the MS question but got the control question instead. The last group consisted of 46 participants with an age ranging from 20 to 29, mean age being 24 (SD= 1.91). Within this group, 70% was female and 30% was male.

A two-way between group ANOVA analysis was done in order to test whether the four different groups differed significantly in age. The complete output can be found in the appendices. The analysis showed that MS and control groups participants did not differ significantly in age, $F(1, 188) = 0.02$, $p = .895$, $\eta^2_p = .00$. Also participants from groups of the justified or unjustified

immoral scene did not differ significantly in age, $F(1, 188) = 1.12$, $p = .292$, $\eta^2_p = .01$. Lastly was there no interaction effect found between MS and justification of violence, $F(1, 188) = .25$, $p = .619$, $\eta^2_p = .00$. Followingly, a Chi-Square test revealed that participants' gender did not differ significantly between MS and control groups, nor for justified and unjustified groups, $\chi^2 (N= 192, 13) = 11.94$, $p = .533$.

Since material of the series Game of Thrones was used in the study, the level of fan status of the participants has also been assessed. 81.3% of participants already knew Game of Thrones before they participated in the study, the remaining 18.8% did not know the series yet. The considered level of fan status was very scattered around participants, 35.9% claimed they were definitely not a fan, while 25% claimed they definitely were a fan. Participants who were less sure said for 13.5% that they were probably not a fan and 19.3% claiming they probably are a fan. The remaining 6.3% of participants claimed they might or might not be a fan.

3.3 Measurements

In order to answer the research question, there were several concepts analyzed. First, the participant's acceptance of violence was measured. Then, the audience gratification was determined. The participant's search for meaning in life was also assessed, where after the Game of Thrones fan-status of the participant is measured. The full questionnaire can be found in the appendices.

Acceptance of violence. The justification of the immoral character was measured according to four scales. The first scale measures acceptance of violence, according to four questions that were assessed by Krakowiak and Tsay-Vogel (2013). Respondents had to answer four quotes about the perception of violence, by assessing the level that they agree with different statement (e.g. the character was morally justified in her/his actions).

Character liking. In the same way, respondents answered four questions regarding character liking. These questions were assessed by Krakowiak and Tsay-Vogel (2013) and indicated how much a respondent liked or disliked a character.

Positive and negative attributes. Lastly, respondents answered questions indicating their perception of positive attributes and negative attributes of the characters. This measurement was originally created by Pfau, Mullen and Garrow (1995), who would measure positive and negative attributes with a scale ranging from good to bad (e.g. the character is dishonest-honest). Krakowiak and Tsay-Vogel (2013) adjusted this scale by measuring these attributes separately, by asking participants to what extent they agree with positive and negative statements (e.g. The character is dishonest and the character is honest). The researchers separated these statements because they studied morally ambiguous characters, who make a distinction between good and bad less clear. Within this

study, the questions was asked separately as well.

Enjoyment. Additionally, audience gratification was measured, which was firstly assessed by measuring the level of enjoyment that participants elicited from the stimulus material. In order to measure this, the fun-scale from Oliver and Bartsch (2010) was used.

Appreciation. Additionally, appreciation was measured by using the thought provoking and lasting impression scales from Oliver and Bartsch (2010). Researchers such as Hofer (2013) and Rieger et al. (2015) have used the same scales within their studies.

Search for meaning in life. The search for meaning in life was measured, where the questionnaire of Steger, Frazier, Oishi and Kaler (2006) was used. This questionnaire assess the extent to which someone is searching for meaning in life, by answering 10 quotes using a 7-point Likert-scale (e.g. My life has no clear purpose.) This scale has also been used by Hofer (2013). Lastly, the fan status of respondents towards Game Of Thrones was measured and demographics are asked.

3.4 Procedure

The survey was programmed via the survey-tool Qualtrics. This program automatically created a survey layout for different kinds of devices. This was a positive attribute for the survey, because it created the possibility for any participant to take the survey from their preferred device (Regmi, 2016). On top of that does Regmi (2016) emphasize that a user-friendly design is important for its use, which is the case since Qualtrics automatically adjusted to the kind of screen that is being used. The complete questionnaire can be found in the appendices.

Introduction

The survey started off with an introduction text. The respondent was accordingly thanked for their interest in participating in the survey. The survey was introduced by addressing that it is part of a thesis. Respondents were continuously told that the survey will take approximately 15 minutes, and they were asked to read all questions carefully. They were also notified on the fact that the survey could contain spoilers from the series Game of Thrones.

Regmi (2016) describes the importance of taking ethical issues into consideration. For this reason, people are asked at the beginning of the survey whether they agreed to participate in the survey or not. This agreement served as an informed consent, which is mostly used within qualitative studies (Regmi, 2016). Within the introduction, participants were asked whether they are 18 years or older, because the participants were confronted with death in both the stimulating material, as well as in the questions. For the same reason did the introduction state that it is strongly advised to people

who suffer from deep mental health issues to not take this survey. Lastly were respondents reminded of the fact that they can always decide to stop the survey at any given time and an e-mail address was given in the case the respondent has any comments or questions.

Manipulating questions

This research studied the effect of mortality salience on the perception of immoral characters, which was why some participants' mortality had to be made salient. Burke et al. (2010) studied twenty years of mortality salience research and addressed that the most common way to manipulate mortality salience was to ask participants an essay question about their own death. The same method was used in this study. Participants were asked what they think will happen to their body when they die and which feelings arise in them when thinking about this. A timer of three minutes was set on this question to ensure that participants took the time for it.

The control group were shown a question under the same condition. However, the question that they answered was neutral. The control group answered a question about what they think happens to their body when they physically ride a bike and what emotions arise in them when they think about this.

Stimulating material

The mortality salience effect arises sometime after its activation (Burke et al., 2010), which is why the manipulating question was asked before respondents watch the stimulating material. In their article, Burke et al. (2010) show that the effect of mortality salience was best shown in several studies when there was some time between the activation of mortality salience and the measurement of the dependent variables.

As shown in graphic 3.1, did the survey contain two different stimulating clips. Both clips were taken from the series 'Game of Thrones' (Martin, Benioff & Weiss, 2011) where one contains a justified immoral character and one contains an unjustified immoral character. In the unjustified scene (S2E3, min. 45 till 49), a group of men from the King's Guard is shown, who are looking to find a specific person. During their search, they run into a group of traveling people, from who Arya is one (one of the leading characters of the series). The King's Guard attack the travelers, to see whether the person they are looking for is with them. Their search is very violent, they kill many people along the way. One of the men from The King's Guard, Polliver, eventually steals Arya's beloved sword and unnecessarily kills her friend Lommy who got injured during this attack. Participants who are shown this clip are asked to answer questions about Polliver, the man of the

King's Guard.

In the justified scene (S4E1 min 49 till 54), Arya is shown with Sandor, a huge and powerful warrior. They are traveling together. The clip shows them having a dinner at a tavern, while they are being disrupted by Polliver (The man from the King's Guard). Polliver tries to convince Sandor to join him to fight for the King. The situation escalates a few moments later. Arya is eventually forced to kill a man out of self-defense. Then, she kills Polliver, while saying the same words to him as he said before he killed Lommy, Arya's friend. It becomes clear she longed for revenge all along.

After the stimulating material, participants answered the survey questions measuring the acceptance of immoral characters.

3.5 Data preparation

Acceptance of violence

Four items were predicted to measure acceptance of violence, which were all measured based on a Likert-scale. The four items have been entered into factor analysis, under the condition of Principal Component extraction with Varimax rotation, based on Eigenvalues (>1.00), $KMO = .83$, $\chi^2(N = 206, 6) = 480.57$, $p < .001$. The model was able to explain 76.0% of acceptance of violence. One factor was found during the analysis, which is referred to as acceptance of violence and describes the extent to which respondents morally accept the characters' actions. The factor loadings of the individual items can be found in Table 3.1. The negatively loaded item was reversed before conducting a reliability test.

Table 3.1

Factor and reliability analyses for scales for acceptance of violence (N= 206)

Item	Acceptance of Violence
Arya/Polliver was morally justified in her acts	.86
I believe that in general, Arya/Polliver is an ethical person.	-,86
I believe that in general, Arya/Polliver is an ethical person.	.86
It was all right for Arya/Polliver to behave this way.	.91
R ²	.76
Cronbach's α	.89

Character liking

Participants were asked four question regarding character liking, which have been entered in a factor analysis. The items were tested using Principal Components extraction with Varimax rotations. The analysis was based on Eigenvalues (>1.00) and resulted in, $KMO = .81$, $\chi^2(N = 206, 6) = 774.20$, $p < .001$. The model explained the variance in character liking for 84.2%. Based on the Eigenvalues, the model showed 1 factor, which can be described as character liking: explaining the extent to which respondents like and admire the character, as well as the extent to which they would want to be friends with someone like the character. The individual factor loadings can be found in Table 3.2. The negatively loaded item was recoded in reverse before conducting the reliability test.

Table 3.2

Factor and reliability analyses for scales for Character Liking (N=206)

Item	Character Liking
I like Arya/Polliver	.94
I dislike Arya/Polliver	-.92
I would like to be friends with someone like Arya/Polliver	.91
I admire Arya/Polliver	.91
R^2	.84
Cronbach's α	.94

Character attributes

Ten items which were measured according to a Likert-scale have been analyzed according to a factor analysis, under Principal Components extractions with Varimax Rotation. The test was based on Eigenvalues (>1.00), $KMO = .91$, $\chi^2 (N = 206, 45) = 1959.27$, $p < .001$. The overall model was able to explain 79.93% of character attributes. Individual factor loadings can be found in table 3.3. The factors found were:

Positive attributes: This factor included all items that explained positive attributes of the character.

Negative attributes: This factor included all items that explained negative attributes of the character.

Table 3.3

Factor and reliability analyses for scales for Character attributes (N=206)

Item	Positive attributes	Negative attributes
Arya/Polliver does some moral things	.83	-
Arya/Polliver has some positive attributes	.90	-
Arya/Polliver is honest at times	.81	-
Arya/Polliver does some proper things	.87	-
Arya/Polliver does some right things	.89	-
Arya/Polliver does some immoral things	-	.82
Arya/Polliver has some bad attributes	-	.87
Arya/Polliver is dishonest at times	-	.75
Arya/Polliver does some improper things	-	.86
Arya/Polliver does some wrong things	-	.83
R ²	.41	.38
Cronbach's α	.95	.92

Enjoyment

Again, three items which were measured based on a Likert-scale were put into a factor analysis on the basis of Principal Components extraction with Varimax rotation, based on Eigenvalues (>1.00). Which resulted in $KMO = .75$, $\chi^2(N = 206, 3) = 707.25$, $p = < .001$. 92% of variance in enjoyment was explained by this overall model. One factor was found which is thus named as ‘Enjoyment’, describing the extent to which participants enjoyed watching the stimulus material. Factor loadings of individual items can be found in Table 3.4.

Table 3.4

Factor and reliability analyses for scales for Enjoyment (N=206)

Item	Enjoyment
It was fun for me to watch this clip.	.97
I had a good time watching this clip.	.97
The clip was entertaining.	.94
R ²	.92
Cronbach’s α	.96

Appreciation

Six items were used with the goal to measure participants’ appreciation of the clip they watched. All six items were used in a factor analysis based on Principal Components extraction with Varimax rotation, on the basis of Eigenvalues (>1.00). This resulted in $KMO = .76$, $\chi^2(N = 206, 15) = 449.63$, $p < .001$. Variance within appreciation was explained by the overall model for 69.46%. The factors loadings of individual items are found in Table 3.5. Two factors were found within this analysis:

Appreciation later: Describes the type of appreciation that will last a longer time after watching the stimulus material.

Appreciation now: Describes the appreciating experienced that is felt during or right after watching the stimulus material.

Table 3.5

Factor and reliability analyses for scales for Appreciation (N= 206)

Item	Appreciation later	Appreciation now
I found this clip to be very meaningful	-	.74
I was moved by this clip	-	.80
The clip was thought provoking	-	.75
This clip will stick with me for a long time	.87	-
I know I will never forget this clip	.83	-
This clip left me with a lasting impression	.88	-
R ²	.38	.31
Cronbach's α	.86	.68

Search for meaning in life

Participants of the survey got asked ten questions regarding their search for meaning in life. Those questions have been used in a factor analysis based on Principal Components extraction with Varimax rotation, based on Eigenvalues (>1.00), $KMO = .85$, $\chi^2 (N = 206, 45) = 1365.31$, $p < .001$. The entire model was able to explain 73% of search for meaning in life. The factor loadings of individual items can be found in Table 3.6. Items that were negatively loaded have been recoded in reverse before conducting the reliability test. Two factors were found in the analysis:

Search for meaning in life: Including items explaining the extent to which someone is continuously looking for meaning in life.

Established meaning in life: Those items explain the extent to which individuals recognize to know the meaning of their life.

Table 3.6

Factor and reliability analyses for scales for Search for Meaning in Life (N= 206)

Item	Search for meaning in life	Established meaning in life
I understand my life's meaning	-	.82
I am looking for something that makes my life feel meaningful	.80	-
I am always looking to find my life's purpose	.89	-
My life has a clear sense of purpose	-	.92
I have a good sense of what makes my life meaningful	-	.87
I have discovered a satisfying life purpose	-	.86
I am always searching for something that makes my life feel significant	.87	
I am seeking a purpose or a mission for my life	.89	
My life has no clear purpose	-	-.77
I am always searching for meaning in my life	.82	-
R ²	.37	.36
Cronbach's α	.91	.90

3.6 Validity and reliability

Kelley et al. (2003) describe that when designing a questionnaire, it is important to consider the work of experts, because it assures that the measurement of the concept is correct. In this study, the validity of the questionnaire was hence enhanced by the use of previously created scales that measure the concepts of interest (Krakowiak & Tsay-Vogel, 2013; Oliver & Bartsch, 2010; Steger et al., 2006.). On top of that have all scales been used more often (Hofer, 2013; Krakowiak & Tsay-Vogel, 2013; Rieger et al., 2015). Both these things secure the validity of this survey (Kelley et al., 2003).

The reliability of this survey was respected by the fact that scales are formulated in the same way as other researchers have when using them. On top of that was the survey thoroughly tested beforehand by multiple people to ensure that questions and instructions were clear, which is something that is advised by Kelley et al. (2003) to reassure the reliability of the questionnaire.

3.7 Analysis

The data was analyzed by the use of analysis of variance and hierarchical regression analyses. H1 till H32 were analyzed based on analysis of variance. This analysis compares variances between groups and can therefore determine whether significant differences in justifications of immoral characters happen between MS and control groups (Pallant, 2007). A two way analysis has been used in order to test whether two different independent variables have a possible interaction effect. In general terms this means that one independent variables' influence on a particular dependent variable, influences the effect of another independent variable on the dependent variable as well. From H33 and onwards, hierarchical regression analyses was used in order to predict different variables explaining justification of immoral characters (Pallant, 2007). A hierarchical model was used in order to explore the additional value of variables into the model.

4. Results

The results will be discussed. First will the outcomes of the ANOVA analyses be described, where after the regression analysis results will be discussed. The output of all analyses can be found in the appendices. Because this study contains a large number of hypotheses, the results will be concluded by summarizing the accepted and rejected hypotheses.

4.1 Differences between MS and control groups for justified and unjustified violence.

Acceptance of violence as a result of MS and justification of violence.

In order to test whether there are significant differences in acceptance of violence between groups of MS and control groups as well as groups who watched the justified scene or the unjustified scene (as follows referred to as justification of violence), a two-way between-group analysis was conducted.

When analyzing the results regarding differences within groups, there has been a significant main effect found for justification of violence, $F(1, 188) = 150.99, p < .001, \eta^2_p = .45$, therefore H1 can be accepted. Considering Cohen's (1988) criterion, this is a large effect size. In general did the justified immoral clip ($M = 3.17, SD = 0.80$) lead to a significant higher acceptance of violence than the unjustified immoral clip ($M = 1.72, SD = 0.85$). Lastly there was no significant main effect found in acceptance of violence between MS and control groups, $F(1, 188) = 3.14, p = .08, \eta^2_p = .02$. Nor was there a significant interaction effect found between MS and justification of violence, $F(1, 188) = 1.29, p = .258, \eta^2_p = .01$. Therefore, H2, H3 and H4 are rejected.

Character liking as a result of MS and justification of violence.

A two-way ANOVA was performed in order to analyze the impact of MS and Justification of violence on character liking. The between group analysis showed that there are significant differences in character liking between groups who watched the justified immoral clip and groups who watched the unjustified immoral clip, $F(1, 188) = 168.76, p < .001, \eta^2_p = .58$, therefore H5 is accepted. According to Cohen (1988), these results indicate a large effect size from the type of clip that is watched on the extent of character liking. The results show that watching a justified immoral clip ($M = 3.51, SD = 0.81$) predicts higher character liking than when watching an unjustified immoral clip ($M = 1.64, SD = 0.81$).

However, there was no significant difference on character liking found between manipulated and control groups, $F(1, 188) = 1.40, p = .238, \eta^2_p = .01$, therefore H6 and H7 are rejected. Additionally the test showed that there is no significant interaction effect between MS and Justification of violence, $F(1, 188) = 0.21, p = .644, \eta^2_p = .00$. For this reason, H8 is rejected as well.

Positive attributes as a result of MS and justification of violence.

Followingly are character attributes analyzed. Positive and negative attributes are analyzed separately because factor analysis indicated that each is an individual scale. An effect that was found in the analysis is a main effect on positive attributes based on groups who either watched the justified or unjustified scene, $F(1, 188) = 146.79, p < .001, \eta^2_p = .44$, therefore H9 is accepted. The Eta Squared ($\eta^2_p = .44$) shows that whether someone has watched the justified or unjustified scene has large effects on the assignment of positive attributes to the character (Cohen, 1988). It can be expected that watching a justified immoral scene ($M = 4.83, SD = 0.83$) leads to the assignment of more positive attributes than after watching an unjustified immoral scene ($M = 2.79, SD = 1.43$).

The analysis nevertheless did not show a for MS on the assignment of positive attributes, $F(1, 188) = .624, p = .431, \eta^2_p = .00$, therefore H10 and H11 are rejected. The two-way ANOVA additionally showed that there is no significant interaction effect between MS and Justification of violence, $F(1, 188) = 2.14, p = .145, \eta^2_p = .01$. Therefore, H12 is rejected.

Negative attributes as a result of MS and justification of violence.

Followingly, a two-way between-group analysis of variance was conducted for negative attributes. The results showed a significant main effect for justification of violence between groups, $F(1, 188) = 63.69, p < .001, \eta^2_p = .25$, which is considered a large effect size according to Cohen (1988). For this reason, H13 is accepted. Regarding the results, it can be expected that justified immoral behavior ($M = 4.61, SD = 0.94$) leads to assignment of less negative attributes than unjustified immoral behavior ($M = 5.79, SD = 1.09$). Next, there was no significant main effect found for MS, $F(1, 188) = 1.16, p = .282, \eta^2_p = .01$, which is why H14 and H15 are rejected. The results showed again no significant interaction effect between MS and justification of violence, $F(1, 188) = .04, p = .841, \eta^2_p = .00$, therefore H16 is rejected.

Enjoyment as a result of MS and justification of violence.

A two-way ANOVA has been conducted in order to test whether different MS and justification of violence groups differ significantly in the enjoyment of immoral scenes. The analysis shows a significant main effect between justification of violence groups, $F(1, 188) = 10.62, p = .001, \eta^2_p = .05$, therefore H17 is accepted. This result is considered a small/medium effect size according to Cohen (1988), where justified violence ($M = 4.25, SD = 1.58$) leads to higher enjoyment than unjustified violence ($M = 3.44, SD = 1.84$).

The analysis followingly did not show a significant main effect between MS groups, $F(1, 188) = .18, p = .673, \eta^2_p = .00$, which is why H18 and H19 are rejected. Lastly, no significant interaction effect was found between MS and Justification of violence, $F(1, 188) = .41, p = .524, \eta^2_p = .00$. For this reason, H20 is rejected.

Appreciation now as a result of MS and justification of violence.

Appreciation now and later are separately analyzed within a two-way between-group of variance analysis, since factor analysis showed that each functions as a separate scale. The two-way ANOVA for appreciation now showed no significant main effect between groups of MS, $F(1, 188) = 1.28, p = .259, \eta^2_p = .01$, and neither between groups of justification of violence, $F(1, 188) = .47, p = .492, \eta^2_p = .00$. Lastly, the analysis showed no interaction effect between MS and justification of violence, $F(1, 188) = 1.99, p = .160, \eta^2_p = .01$. For this reason, H21, H22 and H23 are rejected.

Appreciation later as a result of MS and justification of violence.

The two-way ANOVA for appreciation later continuously showed no significant main effect between groups of MS, $F(1, 188) = .01, p = .925, \eta^2_p = .00$, nor groups of justification of violence, $F(1, 188) = .05, p = .824, \eta^2_p = .00$. Lastly, the analysis showed no significant interaction effect between MS and justification of violence, $F(1, 188) = .10, p = .758, \eta^2_p = .00$. Hence, H24, H25 and H26 are rejected.

Search for meaning in life as a result of MS and justification of violence.

Based on factor analysis are the original 'search for meaning in life' questions separated between two scales: search for meaning in life and established meaning in life. The two scales have been used separately within the two-way between-groups analyses of variance.

The analysis shows a significant main effect between groups of justification of violence, $F(1, 188) = 4.04, p = .046, \eta^2_p = .02$. However, the effect is perceived to be small according to the criterion of Cohen (1988). Nonetheless, it was found that justified behavior ($M = 4.70, SD = 1.13$) leads to less search for meaning in life than unjustified behavior ($M = 5.03, SD = 1.18$), therefore H27 is accepted. Following did the study show no significant main effect between groups of MS, $F(1, 188) = 1.33, p = .250, \eta^2_p = .01$, hence H28 is rejected. The two-way ANOVA for search for meaning in life resulted in no significant interaction effect between MS and justification of violence, $F(1, 188) = .69, p = .407, \eta^2_p = .00$, therefore H29 is rejected.

Established meaning in life as a result of MS and justification of violence.

Followingly was a two-way ANOVA conducted for established meaning in life. The analysis resulted in no significant main effect between groups of MS, $F(1, 188) = .71, p = .402, \eta^2_p = .00$, nor groups of justification of violence, $F(1, 188) = .24, p = .622, \eta^2_p = .00$. On top of that did the analysis show no significant interaction effect between MS and justification of violence, $F(1, 188) = .05, p = .814, \eta^2_p = .00$. For these reasons, H30, H31 and H32 are rejected.

4.2 Prediction of variables explaining the justification of immoral characters between groups.

Prediction of acceptance of violence based on MS.

A hierarchical regression analysis was performed on the mortality salience group, with acceptance of violence as criterion. The first block of predictors included Justification of violence, the second block added character liking, positive attributes and negative attributes to the model.

In the first model, when only Justification of violence ($\beta = -.64, p < .001$) was used as a predictor, the model reached significance, $R^2 = .42, F(1, 96) = 68.13, p < .001$. However, when character liking ($\beta = .51, p < .001$), positive attributes ($\beta = .25, p = .003$) and negative attributes ($\beta = -.20, p = .007$) were added to the model, the predictive value was significantly improved, $\Delta R^2 = .34, F(3, 93) = 70.33, p < .001$. Hence, H34a till H34c are accepted. At the same time, Justification of violence ($\beta = .001, p = .991$) lost its significance within this second model, therefore H33 is rejected.

Followingly, a hierarchical regression analysis for the control group was conducted under the same conditions. The first model again used only Justification of violence ($\beta = -.687, p < .001$) as a predictor and was found to be significant, $R^2 = .47, F(1, 92) = 82.82, p < .001$. However, when character liking ($\beta = .47, p < .001$), positive attributes ($\beta = .31, p < .001$) and negative attributes ($\beta = -.192, p = .002$) were added to the model, it significantly improved in predictive value, $\Delta R^2 = .34, F(3, 89) = 93.40, p < .001$. For this reason, H36a, H36b and H36c are accepted. Additionally, Justification of violence ($\beta = -.02, p = .770$) lost its significant value within the second model, therefore H35 is rejected.

Prediction of enjoyment based on MS.

First, a hierarchical regression analysis was conducted for the MS group, where enjoyment has been used as a criterion. The first model includes justification of violence as a predictor, while the second model adds character liking, positive attributes and negative attributes to this model. The first model was found to not be significant, $R^2 = .03, F(1, 96) = 3.30, p = .072$. However, the second model was found to significantly improve the predictive value, $\Delta R^2 = .13, F(3, 93) = 4.6, p = .003$. Within this second model, only character liking ($\beta = .69, p = .001$) was found to be a significant contributor to the model, since justification of violence ($\beta = .19, p = .193$), positive attributes ($\beta = -.08, p = .612$) and negative attributes ($\beta = .20, p = .145$) were all found to be insignificant to the model. For this reason, H38a is accepted while H37, H38b and H38c are rejected.

There has been a hierarchical regression analysis conducted under the same conditions for the control group. Within this analysis, the first model including only justification of violence ($\beta = -.28, p = .006$) was found to be significant, $R^2 = .08, F(1, 92) = 7.96, p = .006$. The second model was

found to improve the predictive value, $\Delta R^2 = .10$, $F(3, 89) = 4.91$, $p = .015$. However, neither justification of violence ($\beta = -.28$, $p = .498$), nor character liking ($\beta = .10$, $p = .101$), nor positive attributes ($\beta = .324$, $p = .181$), nor negative attributes ($\beta = .05$, $p = .708$) were found to be significant contributors to the model. H40a, H40b and H40c are rejected. H39 stating ‘justification of violence has a positive impact on enjoyment for control groups’ is also rejected because justification of violence was found to be an insignificant contributor to the second model, while the model was shown to significantly improve the predictive model.

Prediction of appreciation now based on MS.

The extent to which appreciation now can be predicted on the basis of various variables was tested by a hierarchical regression analysis. First, the analysis was conducted for only the MS group, where justification of violence was included in the first model. Character liking, positive attributes and negative attributes were added in the second model and enjoyment was additionally used within the third model. Both the first model, $R^2 = .00$, $F(1, 96) = .25$, $p = .621$, as well as the second model, $\Delta R^2 = .03$, $F(3, 93) = .68$, $p = .480$, were found to be insignificant in predicting appreciation now. However, the third model was found to significantly improve the predictive value of the model, $\Delta R^2 = .18$, $F(1, 92) = 4.74$, $p < .001$. Enjoyment ($\beta = .50$, $p < .001$) was found to be a significant contributor to the model, hence H43 is accepted. At the same time, justification of violence ($\beta = -.01$, $p = .964$), character liking ($\beta = -.03$, $p = .905$), positive attributes ($\beta = .02$, $p = .889$) and negative attributes ($\beta = .06$, $p = .630$) remained to be insignificant to the model. For those reasons, H41 till H42c are rejected.

A hierarchical regression analysis was conducted under the same conditions for the control group. This analysis also showed that the first model, $R^2 = .03$, $F(1, 92) = 2.35$, $p = .129$, as well as the second model, $\Delta R^2 = .03$, $F(3, 89) = 1.27$, $p = .436$, were insignificant in predicting appreciation now. The third model again was found to significantly improve the predictive value of the model, $\Delta R^2 = .07$, $F(1, 88) = 2.50$, $p = .009$. Again only enjoyment ($\beta = .29$, $p = .009$) was found to be a significant contributor to the model while justification of violence ($\beta = .25$, $p = .112$), character liking ($\beta = .23$, $p = .265$), positive attributes ($\beta = -.25$, $p = .164$) and negative attributes ($\beta = -.03$, $p = .843$) were not significant to the model. For this reason, H46 is accepted while H44 till H45c are rejected.

Prediction of appreciation later based on MS.

Next, hierarchical regression analysis was done on the MS group to explain the extent to which appreciation later can be explained by various variables. The first model that was included in

the analysis consisted of the predictor justification of violence. Character liking, positive attributes and negative attributes were added in the second model while enjoyment was additionally added in the third model. The analysis showed that the first model was insignificant in predicting appreciation later, $R^2 = .00$, $F(1, 96) = .00$, $p = .949$. On top of that were both the second model, $\Delta R^2 = .03$, $F(3, 93) = .65$, $p = .464$, as well as the third model, $\Delta R^2 = .00$, $F(1, 92) = .59$, $p = .552$, unable to significantly improve the predictive value of the model. Hence, H47 till H49 are rejected.

When conducting the same analysis under the control group, it is found that the first model again is insignificant when explaining appreciation later, $R^2 = .00$, $F(1, 92) = .13$, $p = .722$. The second model was found to be insignificant in improving the predictive value of the model $\Delta R^2 = .01$, $F(3, 89) = .14$, $p = .937$, as well as the third model, $\Delta R^2 = .01$, $F(1, 88) = .27$, $p = .369$, which was also unable to improve the significant predictive value of the model. Therefore H50 till H2 are rejected.

Prediction of search for meaning in life based on MS.

Following, a hierarchical regression analysis was done on the MS group in order to predict search for meaning in life. The first model included justification of violence, while the second model added character liking, positive attributes and negative attributes to the model. The third model additionally included enjoyment and lastly the fourth model included appreciation now and appreciation later. For the MS group, it was found that the first model including only justification of violence was found to be insignificant in explaining the model, $R^2 = .08$, $F(1, 96) = .61$, $p = .437$. The second model was unable to improve the predictive value of the model, $\Delta R^2 = .04$, $F(3, 93) = 1.19$, $p = .256$. The third model was found to significantly improve the predictive model for search for meaning in life, $\Delta R^2 = .05$, $F(1, 92) = 1.99$, $p = .028$, however the model itself was shown to be insignificant, $p = .088$. The last model however was found to be insignificant in improving the model $\Delta R^2 = .05$, $F(2, 90) = 2.14$, $p < .098$. However the model itself did reach significance, $p = .047$. Nonetheless, neither justification of violence ($\beta = .00$, $p = .996$), nor character liking ($\beta = -.30$, $p = .173$), nor positive attributes ($\beta = .28$, $p = .073$), nor negative attributes ($\beta = .12$, $p = .380$), nor enjoyment ($\beta = .15$, $p = .219$), nor appreciation now ($\beta = .20$, $p = .099$), nor appreciation ($\beta = .07$, $p = .488$) were found to be significant contributors to the model. For those reasons, H53 till H56b are rejected.

When conducting the same analysis for the control group under the same conditions, the first model including only justification of violence ($\beta = .22$, $p = .031$) was found to be significant in predicting search for meaning in life, $R^2 = .05$, $F(1, 92) = 4.79$, $p = .031$. Also the second model was found to improve significantly, $\Delta R^2 = .10$, $F(3, 89) = 4.02$, $p = .016$. The additionally included variables positive attributes ($\beta = -.45$, $p = .012$) and negative attributes ($\beta = -.27$, $p = 0.43$) were found to be significant contributors to the model while justification of violence ($\beta = .29$, $p = .063$)

and character liking ($\beta = .34, p = .095$) were not significant to the model. The third model did not significantly improve the predictive value for search for meaning in life for control participants, $\Delta R^2 = .013, F(1, 88) = 3.51, p = .242$. However the model itself was shown to be significant, $p = .006$. Within this model again positive attributes ($\beta = -.42, p < .020$) and negative attributes ($\beta = -.26, p < .049$) were significant to the model while justification of violence ($\beta = .30, p = .052$), character liking ($\beta = .38, p = .065$) and enjoyment ($\beta = -.13, p = .242$) were not significant to the model. Lastly was the last model found to not significantly improve the model, $\Delta R^2 = .02, F(2, 86) = 2.71, p = .464$, however the model itself was significant, $p = .014$. Only positive attributes ($\beta = -.39, p = .034$) was a significant contributor to the model while negative attributes ($\beta = -.26, p = .051$) and appreciation now ($\beta = .143, p = .217$) and appreciation later ($\beta = -.07, p = .553$) became insignificant and justification of violence ($\beta = .27, p = .084$), character liking ($\beta = .35, p = .092$) and enjoyment ($\beta = -.16, p = .152$) remained not significant to the model. H58a is accepted because positive attributes was found to be a significant contributor to the model. H58c regarding negative attributes is rejected since it was hypothesized that the IV would have a positive influence on search for meaning in life, while the analysis found a negative relation. Lastly, H57, H58a, H59, H60a and H60b are rejected.

Prediction for established meaning in life based on MS.

Lastly, hierarchical regressions were used to predict established meaning in life based on various variables. The MS group was tested with the first model including justification of violence. The second model included character liking, positive attributes and negative attributes. The third model included enjoyment, while the fourth model included appreciation now and later. The analysis showed that for the MS group, the first model was insignificant in predicting established meaning in life ($R^2 = .00, F(1, 96) = .25, p = .620$). The second model was unable to improve the predictive value for the dependent variable, $\Delta R^2 = .00, F(3, 93) = .08, p = .992$. On top of that were both the third model, $\Delta R^2 = .01, F(1, 92) = .26, p = .332$, and the fourth model $\Delta R^2 = .01, F(2, 90) = .37, p = .515$, insignificant in improving the predictive model. For those reasons, H2H61 till H64b are rejected.

A hierarchical regression was lastly performed under the same conditions for the control groups. Within this analysis, the first model again was found to be not significant, $R^2 = .00, F(1, 92) = .04, p = .850$. The second model was unable to improve the predictive value, $\Delta R^2 = .07, F(2, 89) = 1.60, p = .103$. However, the third model was found to significantly improve the predictive value of the model, $\Delta R^2 = .13, F(1, 88) = 4.22, p < .001$, where character liking ($\beta = .50, p = .013$) and enjoyment ($\beta = -.39, p < .001$) were found to be significant contributors to the model. Justification of violence ($\beta = .143, p = .350$), positive attributes ($\beta = -.29, p = .094$) and negative attributes ($\beta = -.116, p = .362$) were found to be insignificant to the model. The fourth model was found to not significantly improve the predictive value of the model, $\Delta R^2 = .03, F(2, 86) = 3.46, p = .238$.

However the model itself did show significance, $p = .003$. Within this model, again character liking ($\beta = .54, p = .008$) and enjoyment ($\beta = -.36, p = .002$) were found to be significant contributions to the model, therefore H66a and H67 are accepted. Justification of violence ($\beta = .17, p = .265$), positive attributes ($\beta = -.34, p = .057$), negative attributes ($\beta = -.12, p = .352$), appreciation now ($\beta = -.17, p = .126$) and appreciation later ($\beta = .14, p = .191$) were not significant to the model, therefore H65, H66b, H66c, H68a and H68b are rejected.

4.3 Summary of the hypotheses results

Because this study contains a large number of hypotheses, the results regarding these expectation will now be listed before continuing with concluding the results. H1 till H32 formulated hypotheses regarding significant differences between groups. Regarding acceptance of violence, H1 has been accepted, since it was found that justification of violence leads to increased acceptance of violence. H2 and H3 were rejected because it was found that groups of MS did not differ significantly in their acceptance of violence for both scenes. On top of that did MS not influence the effect from justification of violence on acceptance of violence, which is why H4 was rejected. Continuing, H5 was accepted since the ANOVA analysis found that justification of violence led to increased character liking. Following, groups of MS did not differ significantly in character liking and MS also did not influence the effect from justification of violence on character liking, which is why H6 till H8 are rejected. Justification of violence was found to lead to increased assignment of positive and negative attributes, which is why H9 and H13 are accepted. It was found that groups of MS do not differ significantly in the assignment of positive and negative attributes, hence H10, H11, H14 and H15 are rejected. On top of that, MS also did not have an influence on the effect justification of violence has on positive and negative attributes, therefore H12 and H16 are rejected. Following, justification of violence was found to increase enjoyment, therefore H17 was expected. Nonetheless it was shown again that groups of MS did not differ significantly in enjoyment, nor did MS and justification of violence led to an interaction effect. For those reasons, H18 till H20 are rejected. Following, it was shown that groups of justification of violence, nor groups of MS differed significantly in appreciation now and later, which is why H21, H22, H24 and H25 are rejected. Logically, there was also no interaction effect found between justification of violence and MS for appreciation now and later, hence H23 and H26 are rejected. Following, it was found that justification of violence led to decreased search for meaning in life, therefore H27 was rejected. Groups of MS did not show to differ significantly in search for meaning in life and MS also was not found to have an interaction effect with MS, therefore H28 and H29 are rejected. Lastly, groups of justification of violence and MS groups were found to not differ significantly in established meaning in life, which is why H30 and H31 are rejected. On top of that was no interaction effect found, therefore H32 is also rejected.

Regarding the prediction of variables explaining the justification of immoral characters, it was first of all shown that character liking and positive attributes have a positive impact on acceptance of violence for both MS and control group, hence H34a, H34b, H36a and H36b are accepted. On top of that was found that negative attributes have a negative impact on acceptance of violence for MS and control group, which is why H34c and H36c are accepted. Justification of violence was not a significant contributor to the models for MS and control groups, therefore H33 and H35 are rejected. Next, it was shown that character liking positively influences enjoyment for MS groups, which is why H38a is accepted. Justification of violence, positive attributes and negative attributes were not significant contributors to the model, therefore H37, H38b and H38c are rejected. For the control group, none of the variables were significant in explaining enjoyment, therefore H39 till H40c are rejected. For appreciation now, it was shown that enjoyment has a positive influence on the dependent variable for both MS and control group, hence H43 and H46 are accepted. Justification of violence, character liking, positive attributes and negative attributes were not significant contributors to the model for both the MS and control group, therefore H41 till H42c and H44 till H45c are rejected. Following, neither justification of violence, nor character liking, nor positive attributes, nor negative attributes, nor enjoyment was able to significantly predict appreciation later for both MS and control groups, therefore H47 till H52 are rejected. Then, when search for meaning in life is predicted for MS groups, neither justification of violence, nor character liking, nor positive attributes, nor negative attributes, nor enjoyment, nor appreciation now, nor appreciation later is able to predict search for meaning in life for MS groups. For this reason, H53 till H56b are rejected. However, when search for meaning in life is predicted for control groups, positive attributes was found to have a negative influence on search for meaning in life, which is why H58b is accepted. On top of that was found that negative attributes have a negative influence on search for meaning in life for control groups. H58c hypothesized a positive relationship towards search for meaning in life, therefore the hypothesis is rejected. Justification of violence, character liking, enjoyment and appreciation now and later are insignificant contributors to the model, therefore H57, H8a and H59 till H60b are rejected. Lastly, when predicting established meaning in life, neither justification of violence, nor character liking, nor positive attributes, nor negative attributes, nor enjoyment, nor appreciation now, nor appreciation later is able to predict any variance in established meaning in life for MS groups, hence H61 till 64b are rejected. However, when established meaning in life is predicted for control groups, character liking was found to have a negative influence, hence H66a is accepted. On top of that was found that enjoyment has a negative influence on established meaning in life for control groups, therefore H67 is accepted. Justification of violence, positive attributes, negative attributes, appreciation now and appreciation later are not significant contributors to the model, therefore H65, H66b, H66c, H68a and H68b are rejected.

5. Conclusion and discussion

5.1 Conclusion

Within this research, the following research question was proposed: “*To what extent does mortality salience influence the justification of an immoral character?*”. The aforementioned results make it able to answer this question, which will be done now. Following, the implications of the results will be discussed and lastly will the limitations be explained and recommendations for future research be made.

As hypothesized, it was found by the results that justified violence led to significant higher acceptance of violence (=H1), character liking (=H5), positive attributes (=H9), enjoyment (=H17) and search for meaning in life (=H27) as well as fewer negative attributes (=H13). However, the data from the ANOVA analyses indicated that MS and control groups did not significantly differ in acceptance of violence (\neq H2 + H3), character liking (\neq H6 + H7), positive attributes (\neq H10 + H11), negative attributes (\neq H14 + 15), enjoyment (\neq H18 + H19), appreciation now (\neq H22), appreciation later (\neq H25), search for meaning in life (\neq H28 + H29) nor established meaning in life (\neq H31 + H32). On top of that did MS not influence the effect of justification of violence on any of the dependent variables (\neq H4 + H8 + H12 + H16 + H20 + H23 + H26).

It could thus be stated that justified immoral behavior leads to an overall higher justification of the immoral character. However, people who consciously acknowledge their own death, and people who are not consciously aware of this prospect do not differ significantly their justification of immoral characters.

When trying to predict different dependent variables, sometimes no differences occur between MS and control groups. First of all when acceptance of violence is explained. In this case, for both MS and control groups, character liking (= H34a + H36a) and positive attributes (= H34b + H36b) have a positive impact on acceptance of violence. On top of that does negative attributes have a negative impact on acceptance of violence for both MS and control groups (= H34c + H36c). Both models are similar in predictive value since the model for the MS group is able to explain 75% of variance within acceptance of violence, which is 81% in case of the control groups. Next, when appreciation later is tried to be predicted, none of the variables was able to explain any variance within appreciation later for both MS and control groups (\neq H47 till H52).

Nonetheless, differences do occur between MS and control groups when trying to predict different dependent variables. This indicates that the construction of justification of immoral characters is dependent on MS. Firstly when predicting enjoyment of the stimulus material, it is

found that within the MS group, character liking positively influences enjoyment within a model that successfully explains 17% of enjoyment (= H38a). At the same time, none of the variables, neither character liking, is significantly able to explain the enjoyment of stimulus material within control groups (\neq H37 + H38b till H40c). This implies that under the condition of MS, character liking becomes important in predicting enjoyment, while this is not the case when mortality is not salient.

On top of that did results show that appreciation now within MS groups could be predicted for 21% by a model containing enjoyment as a significant, positive contributor (= H43), while all other variables are not significant to the model (\neq H41 till H42c). Within the control group, it is found that this model remains significant, with enjoyment still as a significant contributor (= H46). The other variables remain not significant in this model (\neq H44 till H45c). However, the model has lost predictive value since it is only able to predict 13% of appreciation now. This implicates that enjoyment becomes more important in predicting the appreciation in the moment when people are under the condition of MS.

Contrariwise did the same analysis for search for meaning in life show that under control groups, 18% of search for meaning in life could be predicted based on a model including positive attributes (=H58b) and negative attributes (\neq H58c) as significant contributors. This implicates that control participants were less likely to experience a search for meaning in life, when they assigned positive and negative attributes towards the character in the stimulus material. None of the other variables were significant contributors to this model for the control group (\neq H57 + H58a + H59 till H60b). At the same time, positive and negative attributes lose its predictive value for MS groups (\neq H54b + H54c), showing that MS restrains the effect of positive and negative attributes on search for meaning in life. None of the other variables was able to predict any variance in search for meaning in life for MS groups (\neq H53 + H54a + H55 till H56b).

Similarly, it was found that under MS participants, no variables were able to significantly explain any variance within established meaning in life (\neq H61 till H64b). However, the data on control groups show that character liking positively influences (=H66a), and enjoyment (=H67) negatively influences established meaning in life. Those two variables are significant contributors to a model that successfully explains 22% of variance within established meaning in life. No other variables were significant contributors to this model (\neq H65 + H66b + H66c + H68a + H68b). These results show that MS ceases the effect of character liking and enjoyment on established meaning in life.

Altogether, this study has found that MS influences the construction of justification of immoral characters. Specifically does MS intensify or weaken the effect that certain variables, explaining justification of immoral characters, have on other variables explaining this justification. First of all,

the construction of justification of immoral characters is influenced by MS in the sense that MS strengthens the effect of character liking on the enjoyment of immoral content. The conscious awareness of someone's death continuously also strengthens the effect of enjoyment on the appreciation of immoral content in the moment.

However at the same time, the awareness of one's death also decreases the influences of some variables on others. One of these is positive attributes, which has a positive influence on search for meaning in life for control participants. Nevertheless, this variable loses its significant effect on search for meaning in life for MS participants. The same happens for character liking, which positively influences established meaning in life and positive attributes which negatively influences established meaning in life within groups of people who are not consciously aware of their death. At the time that mortality does become salient, these variables lose their significant effect.

Concluding, MS does have an influence on the justification of immoral characters since it influences the construction of the justification. In other words, the justification of an immoral character can be explained differently in the case that someone is consciously aware of their death, in comparison to when someone is not. However, it should be reminded that after all, the two groups do not differ significantly in their justification of the characters.

5.2 Discussion

This study has contributed new and relevant findings about Terror Management Theory and the enjoyment of eudaimonic content, often complementing or contradicting previous research in the field. The implications will now be discussed.

To start, the study was in line with the study of Krakowiak and Tsay-Vogel (2013) in the sense that justified immoral behavior overall led to higher justifications of the immoral character. However, it was found that people under MS do not significantly differ in their justification of immoral characters, nor does MS influence the effect of justified immoral behavior on the justification of the immoral character. These results contradict expectations since generally, people under MS respond more positively towards people who uphold or defend cultural values and more negative towards people who violate those values (Greenberg et al., 1997; Rosenblatt et al., 1989). The study of Burke et al. (2010) showed that within twenty years of MS research, the acknowledgement of one's death was usually found to have moderate to large effects on behaviors and attitudes, while in this case there was no significant effect found. The results also contradict studies of Rieger and Hofer (2017), Rieger et al. (2015), Hofer (2013) and Goldenberg et al. (1999), which all showed that people under MS were more positive towards people who uphold cultural values.

The fact that these results deviate with these studies could be because the study addresses morally ambiguous characters, who in essence are never fully upholding cultural values. Within this study, the justified character rather defends cultural values. It could thus be that defending cultural values leads to different effects of MS than upholding cultural values, though both being perceived positively.

At the same time, control participants were found to already be acceptive towards justified immoral characters. These results are in line with the study of Krakowiak and Tsay-Vogel (2013) and can be explained by the fact that viewers morally disengage from the immoral act in order to continue liking their preferred character to secure the experience of enjoyment. It could be that in the case of immoral characters, moral disengagement restrains the effect of MS. This would mean that moral disengagement already leads to the maximum acceptance of immoral behavior. In the end, the presented behavior does not directly uphold cultural values, it rather defends them while at the same time being immoral. It thus seems logical that viewers are unable to completely accept the behavior that is presented to them and hence do not accept it more in the case of MS.

Followingly did the results show that people who watched justified behavior had less search for meaning in life than in case of unjustified behavior. This is in line with the study of Rieger and Hofer (2017), which showed that positive outcomes led to less search for meaning in life. However,

the effect size was only small and no differences occurred between MS and control groups.

Additionally it was found that in the case that people are not consciously aware of their death, search for meaning in life could be explained by positive and negative attributes while established meaning in life could be explained by character liking and enjoyment. However, in the case of MS, none of the variables explaining justification of immoral characters was able to predict any percentage of search for or established meaning in life. This could be explained considering the implications of TMT (Greenberg et al., 1997). TMT argues that when mortality is salient, the system that buffers against anxiety about uncontrollable terror is disturbed. People are thus made aware of their established meaning in life and the significance of life they are still searching for. Therefore, search for meaning in life and established meaning life should not be influenced by a medium in case of MS, since these life questions have already been made consciously present by making mortality salient.

The results demonstrating the construction of justification of immoral characters also show that MS strengthens the effect of character liking on the enjoyment of immoral content. Raney (2004) states that enjoyment is dependent on the viewer's perception of the media character and their development within the narrative. Viewers therefore wish for their liked characters to experience the good and their disliked characters to experience the bad. The results could be explain by the fact that TMT leads to a bigger appreciation of people who uphold cultural values (Greenberg et al., 1997). It could therefore be that in the case of MS, appreciation gets a bigger role in the construction of enjoyment. Lastly did the results show that MS strengthens the effect of enjoyment on the appreciation of immoral content in the moment. These results could be explained based on the study of Tamborini et al. (2011), which showed that the fulfillment of hedonic and eudaimonic needs account for unique variance within enjoyment. In the case of MS, the anxiety buffer gets disturbed and people feel the need to recover this system (Greenberg et al., 1997). In this case, the fulfillment of eudaimonic needs can become more important to individuals and thus become more effective when influencing related variables.

5.3 Limitations and recommendations for future research

Despite the relevant findings, did the research suffer some limitations. First of all was the experiment conducted in an online setting. The downside to this is that the researcher had no influence on how participants took the survey. There was no control over how well people participated in the manipulated question, thus it cannot be stated with certainty that participants effectively made their mortality salient. On top of that is it unknown how well participants have watched the stimulus material. If the survey was conducted in a real life setting, it could have been

stated with certainty that experiment circumstances had no influence on research findings.

On top of that was the used stimulus material not displayed in a context of current Western values, since the context of Game of Thrones is within a historic/fantasy storyline. The show does contain Western values, but because of the historic and fantasy genre, the situations displayed do not resonate with the current Western world. It is unknown whether MS in movies or series has different implications in the situation where the watched content is not situated in a place containing current Western values itself. Since according to TMT, mortality saliences leads to a need to defend cultural values in order to secure a feeling of safety and buffer fears about terror and death (Burke, Martens & Faucher, 2010), it can be expected that people become less willing to defend cultural values from other cultures, because it does not secure their personal feeling of safety. Similar was shown in the study of Kneer and Hofer (2016), which found that heavy metal fans were able to restore their anxiety buffer system by listening to metal music, however non-fans were unable to restore their buffer system in this way. This shows that media can have different effects in case of MS, when something does not resonate with one's personal lifestyle. It could thus be that effects of MS were restrained because the context of Game of Thrones does not correspond with participants' personal life, therefore participants could not have felt the need to defend the observed culture, because it did not help their process personally. In the future, it could be better if the used material would be conditioned in the same context as the situation of the viewers judging it. In the current research, it is unknown whether the chosen stimulus material, being unrealistic to real life, has had an influence on the results of the study.

A recommendation for future research could be in line with this limitation. It could therefore be studies whether types of genres have an influence on the justification of an immoral character. On top of that could it be studies if genre and the context of a movie has an influence on the effects of MS.

Lastly is it recommended to study the effect of moral disengagement on the effect of MS, in the case of perceptions of immoral characters. The absent differences in justification of immoral characters between MS and control groups could be explained by moral disengagement, studies could be able to confirm this expectation.

5.4 Implications for society and research

Regarding the scientific field, this study implies that the effects of mortality salience can have its limits in case of morally ambiguous situations. Although several studies showed that mortality salience intensified responses towards people violating or upholding cultural values (Burke, Martens & Faucher, 2010; Greenberg et al., 1997), the current study shows that this does not occur in case of morally ambiguous characters. In the future, researchers should mind that effects of

mortality salience on morally ambiguous situations is tricky, because other theories could be more important in explaining behavior, such as moral disengagement in this study (Krakowiak & Tsay-Vogel, 2013).

The results of this study have different implications for society. First of all, this study could imply for society that when mortality is salient, one should choose meaningful content of which one knows (or can expect) to have a positive ending. Choosing such content would be better to restore the anxiety buffer system since this study has found that justified immoral behavior was better in restoring the anxiety buffer system than unjustified behavior was. The second implications lies in the fact that this study is in line with the study of Krakowiak and Tsay-Vogel (2016), showing that justified immoral behavior is easier accepted and characters are still liked. It was again shown that the context in which someone behaved was very important in how the action and the character was perceived. In media however viewers have the unique opportunity to see and experience the full context, which is something that does not happen in real life. Something that this study could thus imply for society is that people in general should be open to hearing others' stories to be able to understand each other better. If even immoral behavior can be justified when viewers know the intentions behind the action, than day-to-day complications have to be resolved through good communication.

References

- Bellman, S. (2017). Experimental design. In: Matthes J., *The International Encyclopedia of Communication Research Methods*. New Jersey: John Wiley & Sons, Inc.
- Burke, B.L., Martens, A., & Faucher, E.H. (2010). Two decades of Terror Management Theory: A meta-analysis of mortality salience research. *Personality and Social Psychology Review*, 14(2), 155-195.
- Burns, R., & Crawford, C. (1999). School shootings, the media, and public fear: Ingredients for a moral panic. *Crime, Law & Social Change*, 32, 147-168.
- Cameron, J. (Producer and director) & Landau, J. (Producer). (1997). *Titanic* [Motion Picture]. Los Angeles, California: 20th Century Studios.
- Carrega, C. (2019, December 13). School shootings are more common than you may think: A look at the incidents that went under the radar in 2019. *ABC news*. Retrieved from: <https://abcnews.go.com/US/schools-shootings-common-incidents-radar-2019/story?id=67040402>
- Cerone, D. (Producer), Phillips, C. (Producer), Goldwyn, J. (Producer), & Colleton, S. (Producer). (2006). *Dexter* [Motion Picture]. New York City, NY: Showtime Networks.
- Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society*, 4(3), 245-264.
- Cohen, J.W. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Evans, J.R., & Mathur, A. (2005). The value of online surveys. *Internet Research*, 15(2), 195-219.
- Fowler, F.J. (2012). Introduction. In Fowler, F.J., *Survey Research Methods* (pp. 2-10). Thousand Oaks: SAGE Publications.
- George, T. (Producer and director), & Kitman Ho, A. (Producer). (2004). *Hotel Rwanda* [Motion Picture]. Beverly Hills, California: United Artists Corporation.
- Goldenberg, J.L., Pyszczynski, T., Johnson, K.D., Greenberg, J., & Solomon, S. (1999). The

- appeal of tragedy: A terror management perspective. *Media Psychology*, 1, 313-329.
- Greenberg, J., Solomon, S., & Pyszczynski, T. (1997). Terror Management Theory of self esteem and cultural worldviews: Empirical assessments and conceptual refinements. *Advances in Experimental Social Psychology*, 29, 61-139.
- Hartmann, T., & Goldhoorn, C. (2011). Horton and Wohl revisited: Exploring viewers' experience of parasocial interaction. *Journal of Communication*, 61, 1104-1121.
- Hofer, M. (2013). Appreciation and enjoyment of meaningful entertainment. The role of mortality salience and search for meaning in life. *Journal of Media Psychology*, 25(3), 109-117.
- Horton, D., & Wohl, R.R. (1956). Mass communication and para-social interaction. *Psychiatry*, 19(3), 215-229.
- Janssen, S., & Verboord, M. (2018). Methodological guidelines thesis research [guidelines for master thesis]. Rotterdam: Erasmus University
- Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, 15(3), 261-266.
- Kirk, R.E. (2012). Experimental design. In: *The SAGE Handbook of Quantitative Methods in Psychology* (pp. 23-45). London: SAGE Publications Ltd.
- Kneer, J., Hemme, I., & Bente, G. (2011). Vicarious belongingness. Effects of socioemotional commercials under mortality salience. *Journal of Media Psychology*, 23(3), 133-140.
- Kneer, J., & Rieger, D. (2016). The memory remains: How heavy metal fans buffer against the fear of death. *Psychology of Popular Media Culture*, 5(3), 258-272.
- Krakowiak, K.M., & Tsay-Vogel, M. (2013). What makes characters' bad behaviors acceptable? The effects of character motivation and outcome on perceptions, character liking, and moral disengagement. *Mass Communication and Society*, 16(2), 179-199.
- Küng, L. (2017). *Strategic Management in the Media*. London: SAGE Publications.
- Martin, G.R.R. (Producer), Benioff, D. (Producer and director) & Weiss, D.B. (Director). (2011).

- Game of Thrones* [Motion Picture]. Belfast, Northern Ireland: HBO Cable Network.
- Matthews, B., & Ross, L. (2010). C3: Questionnaires. In *Research methods: A practical guide for the Social Sciences* (pp. 200-217). Harlow: Pearson.
- Oliver, M.B., & Bartsch, A. (2010). Appreciation as audience response: Exploring entertainment gratification beyond hedonism. *Human Communication Research, 36*, 53-81.
- Oliver, M.B., Hartmann, T., & Woolley, J.K. (2012). Elevation in response to entertainment portrayals of moral virtue. *Human Communication Research, 38*, 360-378.
- Oliver, M.B., & Raney, A.A. (2011). Entertainment as pleasurable and meaningful: Identifying hedonic and eudaimonic motivations for entertainment consumption. *Journal of Communication, 61*, 984-1004.
- Pfau, M., Mullen, L.J., & Garrow, K. (1995). The influence of television viewing on public perception of physicians. *Journal of Broadcasting & Electronic Media, 39*(4), 441-458.
- Raney, A.A. (2004). Expanding disposition theory: Reconsidering character liking, moral evaluations, and enjoyment. *Communication theory, 14*(4), 348-369.
- Regmi, P.R. (2016). Guide to the design and application of online questionnaire surveys. *Nepal Journal of Epidemiology, 6*(4), 640-644.
- Reinecke, L. (2017). Mood management theory. In Rössler, Hoffner & van Zoonen, *The International Encyclopedia of Media*, (pp. 1-13). John Wiley & Sons
- Rieger, D., Frischlich, L., Högden, F., Kauf, R., Schramm, K., & Tappe, E. (2015). Appreciation in the face of death: Meaningful films buffer against death-related anxiety. *Journal of Communication, 65*, 351-372.
- Rieger, D., & Hofer, M. (2017). How movies can ease the fear of death: The survival or death of the protagonists in meaningful movies. *Mass Communication and Society, 20*(5), 710-733.
- Rieger, D., Reinecke, L., Frischlich, L., & Bente, G. (2014). Media entertainment and well-being – Liking hedonic and eudaimonic entertainment experience to media-induced recovery and vitality. *Journal of Communication, 64*, 456-478.

- Rosenblatt, A., Greenberg, J., Solomon, S., Pyszczynski, T., & Lyon, D. (1989). Evidence for Terror Management Theory I. The effects of mortality salience on reactions to those who violate or uphold cultural values. *Journal of Personality and Social Psychology*, 57(4), 681-690.
- Sanders, M.S. (2010). Making a good (bad) impression: Examining the cognitive processes of disposition theory to form a synthesized model of media character impression formation. *Communication Theory*, 20, 147-168.
- Steger, M.F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53(1), 80-93.
- Tamborini, R. (2011). Moral intuition and media entertainment. *Journal of Media Psychology*, 23(1), 39-45.
- Tamborini, R., Grizzard, M., Bowman, N.D., Reinecke, L., Lewis, R.J., & Eden, A. (2011). Media enjoyment as need satisfaction: The contribution of hedonic and nonhedonic needs. *Journal of Communication*, 61, 1025-1042.
- Tsay-Vogel, M., & Krakowiak, M. (2016). Effects of hedonic and eudaimonic motivations on film enjoyment through moral disengagement. *Communication Research Reports*, 33(1), 54-60.
- Vorderer, P., Klimmt, C., & Ritterfeld, U. (2004). Enjoyment: At the heart of media entertainment. *Communication Theory*, 14, 388-408.
- Wirth, W., Hofer, M., & Schramm, H. (2012). Beyond pleasure: Exploring the eudaimonic entertainment experience. *Human Communication Research*, 38(4), 406-428.
- Wolfe, E., & Walker, C. (2019, November 19). In 45 weeks this year, there have been 45 school shootings. *CNN*. Retrieved from: <https://edition.cnn.com/2019/11/15/us/2019-us-school-shootings-trnd/index.html>
- Wright, K.B. (2005). Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication*, 10(3),

<https://doi.org/10.1111/j.1083-6101.2005.tb00259.x>.

Zillmann, D. (1988). Mood management through communication choices. *American Behavioral Scientist*, 31(3), 327-340.

Zillmann, D. (2000). Mood management in the context of selective exposure theory. *Annals of the International Communication Association*, 23(1), 103-123.

Appendix

Appendix A: The questionnaire

Testing groups:

1. What do you think will happen to you when you die?
2. Which emotions arise in you when you think about your own death?

Control groups:

1. What do you think happens to you when you watch television?
2. What emotions arise in you when you watch television?

Acceptance of violence (Krakowiak & Tsay-Vogel, 2013)

Read the following statements, please indicate the degree to which these statements apply to you.

Answered by using a 5-point Likert-scale: 1= strongly disagree, 5= strongly agree.

1. The character was morally justified in her/his actions.
2. I consider the character actions as unethical.
3. I believe that in general the character is an ethical person.
4. It was all right for the character to behave this way.

Character liking (Krakowiak & Tsay-Vogel, 2013)

Read the following statements, please indicate the degree to which these statements apply to you.

Answered by using a 5-point Likert-scale: 1= strongly disagree, 5= strongly agree.

1. I like the main character
2. I dislike the main character
3. I would like to be friends with someone like the main character
4. I admire the main character

Positive and negative character attributes by Pfau, Mullen and Garrow (1995), as used by Krakowiak and Tsay-Vogel (2013). Asked separately because morally ambiguous characters make the distinction less clear.

Read the following statements, please indicate the degree to which these statements apply to you.

Answered by using a 7-point Likert-scale: 1= strongly disagree, 7= strongly agree.

1. The main character does some moral things
2. The main character has some good attributes
3. The main character is honest at times
4. The main character does some proper things
5. The main character does some right things

Negative character attributes Pfau, Mullen and Garrow (1995), as used by Krakowiak and Tsay-Vogel (2013).

Read the following statements, please indicate the degree to which these statements apply to you.

Answered by using a 7-point Likert-scale: 1=strongly disagree, 7= strongly agree.

1. The main character does some immoral things.
2. The main character has some bad attributes.
3. The main character is dishonest at times
4. The main character does some improper things
5. The main character does some wrong things

Enjoyment – fun scale: (Oliver & Bartsch, 2010), like used by Hofer (2013) and Rieger et al. (2015)

Answered by using a 7-point Likert-scale: 1 = strongly disagree, 7 = strongly agree.

1. It was fun for me to watch this movie.
2. I had a good time watching this movie.
3. The movie was entertaining.

Appreciation – thought provoking and lasting impression scale (Oliver & Bartsch, 2010), like done by Hofer (2013) and Rieger et al. (2015).

7-point Likert-scale: 1= I do not agree at all, 7= I totally agree.

Read the following statements, please indicate the degree to which these statements apply to you.

Answered by using a 7-point Likert-scale: 1= strongly disagree, 7= strongly agree

1. I found this movie to be very meaningful.
2. I was moved by this movie.
3. The movie was thought provoking.
4. This movie will stick with me for a long time.
5. I know I will never forget this movie.
6. The movie left me with a lasting impression.

Search for meaning in life (Steger et al., 2006)

7-Point Likert-scale, 1= Absolutely untrue, 7= Absolutely true

Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers.

Answered by using a 7-point Likert-scale: 1= absolutely untrue, 7= absolutely true

1. I understand my life's meaning
2. I am looking for something that makes my life feel meaningful
3. I am always looking to find my life's purpose
4. My life has a clear sense of purpose.
5. I have a good sense of what makes my life meaningful
6. I have discovered a satisfying life purpose.
7. I am always searching for something that makes my life feel significant.
8. I am seeking a purpose or mission for my life.
9. My life has no clear purpose.
10. I am searching for meaning in my life.

Fan status of Game of Thrones

1. Did you know the series Game of Thrones before this experiment? Yes/no
2. What number of episodes have you approximately watched of Game of Thrones? Type in number
3. Do you consider yourself a fan of Game of Thrones? 5-point Likert-scale, 1=Absolutely not till 5 = Absolutely

Demographics

1. How old are you?
2. What is your gender?
3. What is your nationality?

Appendix B: Methods output significant differences in age and gender based on survey groups.

Table B.1

Differences in age based on survey groups (N= 192)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	7.860	3	2.620	.470	.704	.007
Intercept	105872.758	1	105872.758	18990.007	.000	.990
MSvsControl	.097	1	.097	.017	.895	.000
JustvsUnjust	6.219	1	6.219	1.116	.292	.006
MSvsControl * JustvsUnjust	1.384	1	1.384	.248	.619	.001
Error	1048.134	188	5.575			
Total	107041.000	192				
Corrected Total	1055.995	191				

Table B.2

Differences in gender based on survey groups (N= 192)

	Value	df	Asymptotic Significance (2-sided)
Pearsons Chi-Square	11.940	13	.533
Likelihood Ratio	14.092	13	.367
Linear-by-Linear Association	.024	1	.878
N of Valid Cases	192		

Appendix C: Output acceptance of violence as a result of MS and justification of violence.

Table C

Acceptance of violence as a result of MS and justification of violence (N= 192)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	104,691	3	34,897	51,958	,000	,453
Intercept	1146,592	1	1146,592	1707,140	,000	,901
MSvsControl	2,107	1	2,107	3,137	,078	,016
JustvsUnjust	101,411	1	101,411	150,990	,000	,445
MSvsControl * JustvsUnjust	,863	1	,863	1,285	,258	,007
Error	126,269	188	,672			
Total	1377,813	192				
Corrected Total	230,961	191				

Appendix D: Output character liking as a result of MS and justification of violence.

Table D

Character liking as a result of MS and justification of violence.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	170,281	3	56,760	86,422	,000	,580
Intercept	1272,070	1	1272,070	1936,837	,000	,912
MSvsControl	,920	1	,920	1,401	,283	,007
JustvsUnjust	168,756	1	168,756	256,945	,000	,577
MSvsControl * JustvsUnjust	,141	1	,141	,214	,644	,001
Error	123,474	188	,657			
Total	1566,063	192				
Corrected Total	293,755	191				

Appendix E: Output positive attributes as a result of MS and justification of violence

Table E.

Positive attributes as a result of MS and justification of violence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	203,025	3	67,675	49,780	,000	,443
Intercept	2786,601	1	2786,601	2049,733	,000	,916
MSvsControl	,848	1	,848	,624	,431	,003
JustvsUnjust	199,556	1	199,556	146,787	,000	,438
MSvsControl * JustvsUnjust	2,907	1	2,907	2,138	,145	,011
Error	255,585	188	1,359			
Total	3249,360	192				
Corrected Total	458,610	191				

Appendix F: Output negative attributes as a result of MS and justification of violence

Table F

Negative attributes as a result of MS and justification of violence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	67,991	3	22,664	21,791	,000	,258
Intercept	5191,569	1	5191,569	4991,753	,000	,964
MSvsControl	1,209	1	1,209	1,162	,282	,006
JustvsUnjust	66,240	1	66,240	63,690	,000	,253
MSvsControl * JustvsUnjust	,042	1	,042	,040	,841	,000
Error	195,525	188	1,040			
Total	5463,520	192				
Corrected Total	263,517	191				

Appendix G: Output enjoyment as a result of MS and justification of violence

Table G

Enjoyment as a result of MS and justification of violence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	33,157	3	11,052	3,730	,012	,056
Intercept	2835,960	1	2835,960	957,137	,000	,836
MSvsControl	,530	1	,530	,179	,673	,001
JustvsUnjust	31,477	1	31,477	10,623	,001	,053
MSvsControl * JustvsUnjust	1,209	1	1,209	,408	,524	,002
Error	557,036	188	2,963			
Total	3429,444	192				
Corrected Total	590,194	191				

Appendix H: Output appreciation now as a result of MS and justification of violence

Table H

Appreciation now as a result of MS and justification of violence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5,392	3	1,797	1,223	,303	,019
Intercept	2388,979	1	2388,979	1625,672	,000	,896
MSvsControl	1,883	1	1,883	1,281	,259	,007
JustvsUnjust	,695	1	,695	,473	,492	,003
MSvsControl * JustvsUnjust	2,920	1	2,920	1,987	,160	,010
Error	276,272	188	1,470			
Total	2666,444	192				
Corrected Total	281,664	191				

Appendix I: Output appreciation later as a result of MS and justification of violence.

Table I

Appreciation later as a result of MS and justification of violence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	,272	3	,091	,050	,985	,001
Intercept	1632,827	1	1632,827	901,810	,000	,827
MSvsControl	,016	1	,016	,009	,925	,000
JustvsUnjust	,090	1	,090	,050	,824	,000
MSvsControl * JustvsUnjust	,172	1	,172	,095	,758	,001
Error	340,395	188	1,811			
Total	1974,000	192				
Corrected Error	340,667	191				

Appendix J: Output search for meaning in life as a result of MS and justification of violence.

Table J

Search for meaning in life as a result of MS and justification of violence.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	7,912	3	2,637	1,968	,120	,030
Intercept	4542,140	1	4542,140	3388,877	,000	,947
MSvsControl	1,788	1	1,788	1,334	,250	,007
JustvsUnjust	5,417	1	5,417	4,042	,046	,021
MSvsControl * JustvsUnjust	,925	1	,925	,691	,407	,004
Error	251,978	188	1,340			
Total	4799,520	192				
Corrected Total	259,890	191				

Appendix K: Output established meaning in life as a result of MS and justification of violence

Table K

Established meaning in life as a result of MS and justification of violence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1,578	3	,526	,331	,803	,005
Intercept	3929,896	1	3929,896	2474,101	,000	,929
MSvsControl	1,122	1	1,122	,706	,402	,004
JustvsUnjust	,387	1	,387	,243	,622	,001
MSvsControl * JustvsUnjust	,088	1	,088	,055	,814	,000
Error	298,622	188	1,588			
Total	4231,520	192				
Corrected Total	300,200	191				

Appendix L: Output prediction of acceptance of violence based on MS

Table L.1

Model summary for MS group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,644	,415	,409	,79143	,415	68,126	1	96	,000
2	,867	,752	,741	,52406	,336	41,982	3	93	,000

Table L.2

ANOVA for MS group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42,671	1	42,671	68,126	,000
	Residual	60,130	96	,626		
	Total	102,801	97			
2	Regression	77,260	4	19,315	70,330	,000
	Residual	25,541	93	,275		

Total	102,801	97
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Table L.3

Coefficients table for MS group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,320	,254		16,981	,000
	JustvsUnjust	-1,320	,160	-,644	-8,254	,000
2	(Constant)	1,542	,614		2,511	,014
	JustvsUnjust	,002	,163	,001	,011	,991
	Character liking mean	,433	,092	,508	4,727	,000
	Positive attributes mean	,177	,058	,249	3,022	,003
	Negative attributes mean	-,180	,065	-,199	-2,748	,007

Table L.4

Model summary for control group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,687	,473	,467	,84788	,473	82,428	1	92	,000
2	,899	,808	,799	,52064	,335	51,664	3	89	,000

Table L.5

ANOVA for control group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59,258	1	59,258	82,428	,000
	Residual	66,139	92	,719		
	Total	125,397	93			
2	Regression	101,272	4	25,318	92,400	,000
	Residual	24,125	89	,271		
	Total	125,397	93			

Table L.6

Coefficients table for control group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,932	,275		17,945	,000
	JustvsUnjust	-1,588	,175	-,687	-9,079	,000
2	(Constant)	1,582	,605		2,613	,011
	JustvsUnjust	-,050	,170	-,022	-,294	,770
	Character liking mean	,426	,086	,467	4,931	,000
	Positive attributes mean	,221	,059	,314	3,774	,000
	Negative attributes mean	-,184	,059	-,192	-3,124	,002

Appendix M: Output prediction of enjoyment based on MS

Table M.1

Model summary for MS group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,182	,033	,023	1,77397	,033	3,302	1	96	,072
2	,407	,166	,130	1,67450	,132	4,915	3	93	,003

Table M.2

ANOVA for MS group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10,391	1	10,391	3,302	,072
	Residual	302,109	96	3,147		
	Total	312,500	97			

2	Regression	51,732	4	12,933	4,612	,002
	Residual	260,768	93	2,804		
	Total	312,500	97			

Table M.3

Coefficients table for MS group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,769	,570		8,364	,000
	JustvsUnjust	-,651	,358	-,182	-1,817	,072
2	(Constant)	-1,078	1,963		-,549	,584
	JustvsUnjust	,682	,520	,191	1,312	,193
	Character liking mean	1,029	,292	,693	3,519	,001
	Positive attributes mean	-,095	,187	-,077	-,509	,612
	Negative attributes mean	,308	,209	,195	1,470	,145

Table M.4

Model summary for control group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,282	,080	,070	1,66462	,080	7,958	1	92	,006
2	,425	,181	,144	1,59678	,101	3,661	3	89	,015

Table M.5

ANOVA for control group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22,051	1	22,051	7,958	,006
	Residual	254,928	92	2,771		
	Total	276,979	93			
2	Regression	50,055	4	12,514	4,908	,001

Residual	226,924	89	2,550
Total	276,979	93	

Table M.6

Coefficients table for control group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	5,351	,540		9,917	,000
	JustvsUnjust	-,969	,343	-,282	-2,821	,006
2	(Constant)	,919	1,856		,495	,622
	JustvsUnjust	,354	,521	,103	,680	,498
	Character liking mean	,439	,265	,324	1,657	,101
	Positive attributes mean	,242	,179	,231	1,347	,181
	Negative attributes mean	,068	,180	,048	,376	,708

Appendix N: Output prediction of appreciation now based on MS

Table N.1

Model summary for MS group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,051	,003	-,008	1,25945	,003	,247	1	96	,621
2	,169	,029	-,013	1,26280	,026	,830	3	93	,480
3	,452	,205	,161	1,14879	,176	20,376	1	92	,000

Table N.2

ANOVA for MS group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,391	1	,391	,247	,621
	Residual	152,275	96	1,586		
	Total	152,667	97			
2	Regression	4,363	4	1,091	,684	,605
	Residual	148,303	93	1,595		
	Total	152,667	97			
3	Regression	31,254	5	6,251	4,736	,001
	Residual	121,413	92	1,320		
	Total	152,667	97			

Table N.3

Coefficients table for MS group

Model		Unstandardized Coefficients B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3,619	,405		8,940	,000
	JustvsUnjust	-,126	,254	-,051	-,497	,621
2	(Constant)	1,516	1,480		1,024	,308
	JustvsUnjust	,203	,392	,081	,517	,606
	Character liking mean	,305	,221	,294	1,383	,170
	Positive attributes mean	-,013	,141	-,015	-,089	,929
	Negative attributes mean	,169	,158	,153	1,071	,287
3	(Constant)	1,862	1,349		1,380	,171
	JustvsUnjust	-,016	,360	-,006	-,045	,965
	Character liking mean	-,025	,214	-,025	-,119	,905
	Positive attributes mean	,018	,128	,021	,140	,889
	Negative attributes mean	,070	,145	,064	,484	,630
	Enjoyment mean	,321	,071	,459	4,514	,000

Table N.4

Model summary for control group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,158	,025	,014	1,16094	,025	2,349	1	92	,129
2	,233	,054	,012	1,16252	,029	,917	3	89	,436
3	,353	,125	,075	1,12474	,070	7,079	1	88	,009

Table N.5

ANOVA for control group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,166	1	3,166	2,349	,129
	Residual	123,997	92	1,348		
	Total	127,163	93			
2	Regression	6,884	4	1,721	1,273	,286
	Residual	120,279	89	1,351		
	Total	127,163	93			
3	Regression	15,839	5	3,168	2,504	,036
	Residual	111,324	88	1,265		
	Total	127,163	93			

Table N.6

Coefficients table for control group

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3,077	,376		8,177	,000
	JustvsUnjust	,367	,240	,158	1,533	,129
2	(Constant)	2,412	1,352		1,785	,078
	JustvsUnjust	,661	,379	,284	1,742	,085
	Character liking mean	,300	,193	,326	1,554	,124
	Positive attributes mean	-,131	,131	-,185	-1,002	,319

	Negative attributes mean	-,012	,131	-,012	-,090	,928
3	(Constant)	2,229	1,309		1,703	0,92
	JustvsUnjust	,590	,368	,254	1,604	,112
	Character liking mean	,213	,190	,231	1,122	,265
	Positive attributes mean	-,179	,128	-,253	-1,402	,164
	Negative attributes mean	-,025	,127	-,026	-,199	,843
	Enjoyment mean	,199	,075	,293	2,661	,009

Appendix O: Output prediction of appreciation later based on MS

Table O.1

Model summary for MS group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,007	,000	-,010	1,28808	,000	,004	1	96	,949
2	,165	,027	-,015	1,29088	,027	,861	3	93	,464
3	,176	,031	-,022	1,29537	,004	,356	1	92	,552

Table O.2

ANOVA for MS group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,007	1	,007	,004	,949
	Residual	159,278	96	1,659		
	Total	159,285	97			
2	Regression	4,313	4	1,078	,647	,630
	Residual	154,972	93	1,666		
	Total	159,972	97			
3	Regression	4,910	5	,982	,585	,711

Residual	154,374	92	1,678
Total	159,285	97	

Table O.3

Coefficients table for MS group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2,933	,414		7,084	,000
	JustvsUnjust	-,017	,260	-,007	-,064	,949
2	(Constant)	1,408	1,513		,931	,354
	JustvsUnjust	,416	,401	,163	1,037	,302
	Character liking mean	,339	,225	,320	1,503	,136
	Positive attributes mean	-,067	,144	-,076	-,468	,641
	Negative attributes mean	,053	,161	,047	,329	,743
	(Constant)	1,460	1,521		,960	,340
3	JustvsUnjust	,383	,406	,150	,943	,348
	Character liking mean	,290	,241	,273	1,203	,232
	Positive attributes mean	-,063	,145	-,071	-,435	,665
	Negative attributes mean	,038	,164	,034	,234	,815
	Enjoyment mean	,048	,080	,067	,597	,552

Table O.4

Model summary for control group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,037	,001	-,009	1,40309	,001	,127	1	92	,722
2	,078	,006	-,039	1,42323	,005	,138	3	89	,937
3	,123	,015	-,041	1,42471	,009	,815	1	88	,369

Table O.5

ANOVA for control group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,250	1	,250	,127	,722
	Residual	181,117	92	1,969		
	Total	181,368	93			
2	Regression	1,090	4	,273	,135	,969
	Residual	180,277	89	2,026		
	Total	181,368	93			
3	Regression	2,745	5	,549	,270	,928
	Residual	178,623	88	2,030		
	Total	181,368	93			

Table O.6

Coefficients table for control group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2,772	,455		6,094	,000
	JustvsUnjust	,103	,290	,037	,357	,722
2	(Constant)	2,220	1,655		1,342	,183
	JustvsUnjust	,328	,464	,118	,706	,482
	Character liking mean	,091	,236	,083	,385	,701
	Positive attributes mean	,014	,160	,016	,085	,932
	Negative attributes mean	-,015	,161	-,013	-,096	,924

3	(Constant)	2,141	1,659		1,291	,200
	JustvsUnjust	,298	,466	,107	,639	,525
	Character liking mean	,054	,240	,049	,223	,824
	Positive attributes mean	-,007	,162	-,008	-,043	,966
	Negative attributes mean	-,021	,161	-,018	-,132	,896
	Enjoyment mean	,085	,095	,106	,903	,369

Appendix P: Output prediction of search for meaning in life based on MS

Table P.1

Model summary for MS group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,079	,006	-,004	1,25070	,006	,609	1	96	,437
2	,220	,048	,008	1,24345	,042	1,374	3	93	,256
3	,312	,097	,048	1,21762	,049	4,988	1	92	,028
4	,378	,143	,076	1,19969	,045	2,385	2	90	,098

Table P.2

ANOVA for MS group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,952	1	,952	,609	,437
	Residual	150,168	96	1,564		
	Total	151,120	97			
2	Regression	7,327	4	1,832	1,185	,323
	Residual	143,793	93	1,546		
	Total	151,120	97			
3	Regression	14,722	5	2,944	1,986	,088
	Residual	136,398	92	1,483		
	Total	151,120	97			

4	Regression	21,586	7	3,084	2,143	,047
	Residual	129,534	90	1,439		
	Total	151,120	97			

Table P.3

Coefficients table for MS group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,474	,402		11,127	,000
	JustvsUnjust	,197	,253	,079	,780	,437
2	(Constant)	2,941	1,458		2,018	,047
	JustvsUnjust	,142	,386	,057	,366	,715
	Character liking mean	-,120	,217	-,116	-,554	,581
	Positive attributes mean	,227	,139	,263	1,635	,105
	Negative attributes mean	,202	,155	,184	1,301	,196
3	(Constant)	3,122	1,430		2,184	0,31
	JustvsUnjust	,027	,382	,011	,070	,944
	Character liking mean	-,294	,226	-,284	-1,297	,198
	Positive attributes mean	,243	,136	,282	1,785	,078
	Negative attributes mean	,150	,154	,137	,977	,331
	Enjoyment mean	,168	,075	,242	2,233	,028
4	(Constant)	2,653	1,425		1,862	,066
	JustvsUnjust	,002	,378	,001	,006	,996
	Character liking mean	-,309	,225	-,300	-1,374	,173
	Positive attributes mean	,244	,134	,283	1,817	,073
	Negative attributes mean	,134	,152	,122	,882	,380
	Enjoyment mean	,102	,083	,147	1,237	,219
	Appreciation now mean	,195	,117	,196	1,669	,099

Appreciation later mean	,072	,104	,074	,696	,488
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Table P.4

Model summary for control group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,222	,049	,039	1,05197	,049	4,789	1	92	,031
2	,391	,153	,115	1,00964	,104	3,625	3	89	,016
3	,408	,166	,119	1,00744	,013	1,388	1	88	,242
4	,425	,181	,114	1,01002	,015	,775	2	86	,464

Table P.5

ANOVA for control group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,300	1	5,300	4,789	,031
	Residual	101,810	92	1,107		
	Total	107,110	93			
2	Regression	16,386	4	4,096	4,019	,005
	Residual	90,724	89	1,019		
	Total	107,110	93			
3	Regression	17,795	5	3,559	3,507	,006
	Residual	89,315	88	1,015		
	Total	107,110	93			
4	Regression	19,377	7	2,768	2,713	,014
	Residual	87,733	86	1,020		
	Total	107,110	93			

Table P.6

Coefficients table for control group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,250	,341		12,464	,000
	JustvsUnjust	,475	,217	,222	2,188	,031
2	(Constant)	5,618	1,174		4,786	,000
	JustvsUnjust	,620	,329	,291	1,884	,063
	Character liking mean	,283	,168	,335	1,686	,095
	Positive attributes mean	-,292	,113	-,450	-2,578	,012
	Negative attributes mean	-,234	,114	-,265	-2,053	,043
3	(Constant)	5,690	1,173		4,852	,000
	JustvsUnjust	,648	,330	,304	1,967	,052
	Character liking mean	,317	,170	,376	1,868	,065
	Positive attributes mean	-,273	,114	-,421	-2,391	,019
	Negative attributes mean	-,229	,114	-,259	-2,009	,048
4	Enjoyment mean	-,079	,067	-,127	-1,178	,242
	(Constant)	5,503	1,198		4,595	,000
	JustvsUnjust	,585	,335	,274	1,747	,084
	Character liking mean	,292	,172	,346	1,702	,092
	Positive attributes mean	-,250	,116	-,385	-2,154	,034
	Negative attributes mean	-,227	,114	-,256	-1,983	,051
	Enjoyment mean	-,101	,070	-,162	-1,445	,152
Appreciation now mean	,132	,106	,143	1,243	,217	
Appreciation later mean	-,050	,084	-,065	-,595	,553	

Appendix Q: Output prediction for established meaning in life based on MS

Table Q.1

Model summary for MS group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,051	,003	-,008	1,31907	,003	,248	1	96	,620
2	,060	,004	-,039	1,33949	,001	,032	3	93	,992
3	,117	,014	-,040	1,33984	,010	,951	1	92	,332
4	,168	,028	-,047	1,34471	,014	,668	2	90	,515

Table Q.2

ANOVA for MS group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,431	1	,431	,248	,620
	Residual	167,034	96	1,740		
	Total	167,465	97			
2	Regression	,601	4	,150	,084	,987
	Residual	166,864	93	1,794		
	Total	167,465	97			
3	Regression	2,309	5	,462	,257	,935
	Residual	165,156	92	1,795		
	Total	167,465	97			
4	Regression	4,723	7	,675	,373	,916
	Residual	162,742	90	1,808		
	Total	167,465	97			

Table Q.3

Coefficients table for MS group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,251	,424		10,025	,000
	JustvsUnjust	,133	,267	,051	,498	,620
2	(Constant)	4,166	1,570		2,653	,009
	JustvsUnjust	,174	,416	,066	,418	,677
	Character liking mean	,062	,234	,057	,266	,791
	Positive attributes mean	-,039	,149	-,043	-,259	,796
	Negative attributes mean	,002	,167	,002	,014	,989
3	(Constant)	4,079	1,573		2,593	,011
	JustvsUnjust	,229	,420	,088	,545	,587
	Character liking mean	,145	,249	,134	,584	,561
	Positive attributes mean	-,046	,150	-,051	-,310	,757
	Negative attributes mean	,027	,169	,024	,160	,873
4	Enjoyment mean	-,081	,083	-,111	-,975	,332
	(Constant)	3,830	1,597		2,398	,019
	JustvsUnjust	,193	,424	,074	,455	,650
	Character liking mean	,119	,252	,110	,472	,638
	Positive attributes mean	-,041	,151	-,046	-,275	,784
	Negative attributes mean	,019	,170	,017	,114	,910
	Enjoyment mean	-,104	,093	-,143	-1,127	,263
Appreciation now mean	,059	,131	,056	,447	,656	
	Appreciation later mean	,096	,116	,094	,827	,410

Table Q.4

Model summary for control group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,020	,000	-,010	1,19595	,000	,036	1	92	,850
2	,259	,067	,025	1,17467	,067	2,121	3	89	,103
3	,440	,193	,147	1,09856	,126	13,759	1	88	,000
4	,469	,220	,156	1,09288	,026	1,459	2	86	,238

Table Q.5

ANOVA for control group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,052	1	,052	,036	,850
	Residual	131,588	92	1,430		
	Total	131,640	93			
2	Regression	8,832	4	2,208	1,600	,181
	Residual	122,807	89	1,380		
	Total	131,640	93			
3	Regression	25,437	5	5,087	4,215	,002
	Residual	106,202	88	1,207		
	Total	131,640	93			
4	Regression	28,922	7	4,132	3,459	,003
	Residual	102,718	86	1,194		
	Total	131,640	93			

Table Q.6

Coefficients table for control group

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,532	,388		11,691	,000
	JustvsUnjust	,047	,247	,020	,190	,850
2	(Constant)	5,063	1,366		3,707	,000
	JustvsUnjust	,242	,383	,102	,631	,530
	Character liking mean	,350	,195	,374	1,795	,076
	Positive attributes mean	-,277	,132	-,384	-2,095	,039
	Negative attributes mean	-,132	,133	-,135	-,995	,322
3	(Constant)	5,312	1,279		4,153	,000
	JustvsUnjust	,338	,359	,143	,940	,350
	Character liking mean	,469	,185	,501	2,532	,013
	Positive attributes mean	-,211	,125	-,293	-1,694	,094
	Negative attributes mean	-,114	,124	-,116	-,916	,362
	Enjoyment mean	-,271	,073	-,392	-3,709	,000
4	(Constant)	5,452	1,296		4,307	,000
	JustvsUnjust	,407	,363	,172	1,122	,265
	Character liking mean	,500	,186	,535	2,695	,008
	Positive attributes mean	-,243	,126	-,336	-1,926	,057
	Negative attributes mean	-,116	,124	-,118	-,936	,352
	Enjoyment mean	-,245	,075	-,356	-3,254	,002
	Appreciation now mean	-,177	,115	-,174	-1,547	,126
Appreciation later mean	,119	,090	,140	1,317	,191	